DOCUMENT RESUME

ED 142 161	HE 009 192
AUTHOR	Ryan, John W., Ed.
TITLE	Proceedings of the Annual Meeting of the Council of Graduate Schools in the United States.
INSTITUTION	Council of Graduate Schools in the U.S., Washington, D.C.
PUB DATE	Dec 73
NOTE	164p.; Annual Meeting (13th, Williamsburg, Virginia, December 12-14, 1973); Some parts may be marginally legible due to small type
AVAILABLE FROM	Council of Graduate Schools in the United States, One Dupont Circle, Suite 740, Washington, D.C. 20036 ($5.00)
EDRS PRICE	MF-$0.83 HC-$8.69 Plus Postage.
DESCRIPTORS	*College Deans; College Teachers; *Conference Reports; Educational Finance; Educational Programs; *Evaluation; Governance; Graduate Students; *Graduate Study; *Higher Education; Planning; Professional Education; Science Education; Sciences; Social Development; *Teacher Education; Workshops

ABSTRACT

The 1973 meeting of the Council of Grauate Schools is reported including a panel on "Scholarship for Society" by Michael J. Pelczar, Jr., Ralph E. Morrow, Joe N. Gerber, and Jacob E. Cobb. Other discussion groups include evaluation of graduate programs by Arthur C. Gentile, Frank E. Horton, and John T. Kirby; governance and organization by John K. Major, Jan Rocek, and Charles G. Mayo; new developments in college teacher preparation by Alvin H. Proctor, Charles A. Leone, Mary Ann Carroll, and Frank J. Vattano; and financing graduate education by Donald White, Dwight H. Horch, Samuel M. Nabrit, and Arliss L. Roaden. Workshops are reported for new graduate deans at master's institutions by Mary Evelyn Huey, Phyllis W. Watts, Dale R. Comstock and Raymond F. McCoy; and for doctoral institutions by Sam C. Webb, Herbert D. Rhodes, Carroll L. Miller, and Robert F. Kruh. A biomedical sciences workshop conducted by William A. Macmillan, Lionel M. Bernstein, and Ronald W. Estabrook is reported. Additional programs conducted include discussion of evaluation of graduate programs by Jacob E. Cobb, Robben W. Fleming, Robert Kirkwood, and Sterling M. McMurrin; and the long- and short-term prospects for graduate education by Charles T. Lester, John K. Folger, Norman Hackerman, and Nils Y. Wessell. (JMF)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED 142-161

Proceedings of the Thirteenth Annual Meeting

COUNCIL OF GRADUATE SCHOOLS IN THE UNITED STATES

WILLIAMSBURG, VIRGINIA
DECEMBER 12-14, 1973
CONFERENCE CENTER

HE00[illegible]

Proceedings of the Thirteenth Annual Meeting

COUNCIL OF GRADUATE SCHOOLS IN THE UNITED STATES

cgs

WILLIAMSBURG, VIRGINIA
DECEMBER 12-14, 1973
CONFERENCE CENTER

Officers and Executive Committee

JACOB E. COBB (Chairman), Indiana State University

DAVID R. DEENER (Past Chairman), Tulane University

CHARLES T. LESTER (Chairman-Elect), Emory University

WENDELL H. BRAGONIER (1973), Colorado State University

SANFORD S. ELBERG (1975), University of California, Berkeley

PHILIP E. KUBZANSKY (1974), Boston University

JOHN K. MAJOR (1975), New York University

RAYMOND P. MARIELLA (1974), Loyola University of Chicago

KATHRYN A. McCARTHY (1975), Tufts University

S. D. SHIRLEY SPRAGG (1973), University of Rochester

D. C. SPRIESTERSBACH (1973), University of Iowa

DONALD W. TAYLOR (1974), Yale University

J. BOYD PAGE (*ex officio*), President, CGS

Edited by John W. Ryan

Contents

First Plenary Session

Welcoming Remarks

George R. Healy, College of William & Mary 1

Chairman's Address

Jacob E. Cobb, Indiana State University 1

Second Plenary Session - Panel on "Scholarship for Society"

Michael J. Pelczar, Jr., University of Maryland 9
Ralph E. Morrow, Washington University 11
Joe N. Gerber, Stephen F. Austin State University 13
Jacob E. Cobb, Indiana State University 15

Workshop for New Graduate Deans

Master's Institutions

Introductory Remarks

Mary Evelyn Huey, Texas Woman's University 17

Phyllis W. Watts, California State University, Fresno 18

Recruiting and Admission

Dale R. Comstock, Central Washington State College 23

Academic Standards and Degree Requirements

Raymond F. McCoy, Xavier University 27

Doctoral Institutions

Introductory Remarks

Sam C. Webb, Georgia Institute of Technology 31

Organization and Administration of the Graduate School

Herbert D. Rhodes, University of Arizona 31

Recruitment and Admission of Graduate Students

Carroll L. Miller, Howard University 38

Academic Standards and Degree Requirements

Robert F. Kruh, Kansas State University 41

Biomedical Sciences Workshop

Introductory Remarks

William A. Macmillan, University of Vermont 43

Lionel M. Bernstein, U.S. Department of Health,
Education, and Welfare 45
Ronald W. Estabrook, University of Texas,
Southwestern Medical School at Dallas 51

Third Plenary Session - Evaluation of Graduate Programs

Introductory Remarks

Jacob E. Cobb, Indiana State University 61

Robben W. Fleming, University of Michigan 61
Robert Kirkwood, Federation of Regional Accrediting
Commissions of Higher Education 65
Sterling M. McMurrin, University of Utah 68

Discussion Groups
Evaluation of Graduate Programs
Introductory Remarks

Arthur C. Gentile, University of Oklahoma 73
Frank E. Horton, University of Iowa 73
John T. Kirby, Florida Atlantic University 74

Governance and Organization

John K. Major, New York University 77
Jan Rocek, University of Illinois, Chicago Circle 80
Charles G. Mayo, University of Southern California 82

New Developments in College Teacher Preparation
Introductory Remarks

Alvin H. Proctor, Kansas State College of Pittsburg 85
A Professional Development Project for Comprehensive College Instructor Preparation
Charles A. Leone, Bowling Green State University 85
Cognitive Aspects of College Teaching
Mary Ann Carroll, Indiana State University 93
The Preparation of Graduate Students for College Teaching
Frank J. Vattano, Colorado State University 96

Financing Graduate Education
Introductory Remarks

Donald White, Boston College 101
GAPSFAS
Dwight H. Horch, Educational Testing Service 101
National and Regional Programs for Minority Students
Samuel M. Nabrit, Southern Fellowships Fund 103
Financial Support for Graduate Students
Arliss L. Roaden, The Ohio State University 105

Luncheon
Introductory Comments

Jacob E. Cobb, Indiana State University 109
Presentation of Gustave O. Arlt Award
H.C. Erik Midelfort, University of Virginia 110
Gustave O. Arlt, University of California, Los Angeles 110
Reflections of a Graduate Dean
Stephen K. Bailey, American Council on Education 111

Business Meeting
President's Report

J. Boyd Page, Council of Graduate Schools 119

Committee Reports

Graduate Record Examinations Board 121
Task Force Report on Disadvantaged Students 123
Biomedical Sciences Task Force 124
Election of Officers and New Business 125

Fifth Plenary Session - Long and Short-Term Prospects for Graduate Education

Introductory Comments

Charles T. Lester, Emory University 127

John K. Folger, Tennessee Higher Education Commission 127
Norman Hackerman, Rice University 131
Nils Y. Wessell, Alfred P. Sloan Foundation 134

Report on the Council of Graduate Schools—
Graduate Record Examinations Board 1973-74
Survey of Graduate Enrollment, Part I 141

Constitution 151

List of Member Institutions 156

First Plenary Session
Chairman's Address

Wednesday, December 12, 1973, 9:00 a.m.

Chairman: David R. Deener, *Tulane University*
Welcome: George R. Healy, *College of William & Mary*
Chairman's Address: Jacob E. Cobb, *Indiana State University*

George R. Healy

It is my very special pleasure and privilege to bring you greetings from President Graves and the faculty of the College of William and Mary.

I would like to think that it is appropriate that such a group of scholars and scholarly administrators such as you should meet in Williamsburg in close proximity to the College of William and Mary. As the second oldest collegiate institution in the United States, as the seat of the first law school in the colonies, and as the founding site of Phi Beta Kappa, William and Mary has long stood and still stands in commitment to the life of the mind and scholarship which you share and which you advance through your association. So we are particularly delighted that you are here.

We know that you will be busy in your meeting. The program, however, indicates that a certain amount of free time has been provided so that you may enjoy some of the charms of this carefully restored early city. We do hope that in your exploration of Colonial Williamsburg you will find time to visit the college which is close to it and part of the restoration.

I hope you have a very interesting and productive meeting and I thank you for the privilege of greeting you.

Chairman's Address

Jacob E. Cobb

Mr. Chairman, ladies and gentlemen: As we meet this time a little closer to Christmas and as I think about what I am going to try to say, I am reminded of the mother who was shopping for her young child for a Christmas toy. She said to the clerk, examining a toy, "Isn t this rather complicated for a small child?" The clerk replied, "It's an educational toy, madam, designed to adjust the child to live in the world today. Any way he puts it together is wrong."

Now I hope that does not entirely apply to what I have tried to put together, but it might.

I had my remarks pretty well set when a newspaper headline caused me to add a prologue. The major headline in *The National Observer* for November 3, 1973 read, "The Age of Scarcity." The subtitle read, "It's Coming, and It'll be Hard on Those Who Can't Adjust, Make Do."

From the text under the byline of Douglas S. Looney, Glastonbury, Connecticut, let me quote a few sentences. (He is referring to an organization called the *Futures Group*.)

"Everyone was sitting around with feet on the table, hands clasped behind heads, eyes focused on modernistic paintings on the walls, and thoughts somewhere way beyond. For this is the stance in which business is done here at the Futures Group, the sort of place where intellectuals ponder such imponderables as what tomorrow will bring.

"'There can't be scarcity of anything,' Theodore J. Gordon, president of the group, is saying, 'if you've never had it. I mean, you only know you're poor when you see somebody rich.' Ergo, [asks Looney], America, which seemingly has had everything forever, is on the eve of extreme and prolonged shortages? Says Gordon, 'I'm afraid so.' And then there is silence."

***

"For in a nation that was founded on the presumption of plenty, it's disquieting that we don't have enough."

***

"There can't be a scarcity of anything if you've never had it."

Obviously, "The Age of Scarcity" Douglas Looney is writing about is mainly concerned with energy and food—but he does say at one point: "There may be other scarcities. Such as a chronic shortage of talent and wise men [and women]."

I would submit today that in at least two respects those largely responsible for graduate education in the United States have had such great success that they are keenly aware of the scarcities. I refer specifically to the support of graduate students by federal, foundation, and other funds and the high level of confidence in which graduate education was held by virtually all segments of the country. Oh, yes, we had it! And we had it to such an extent that, just as with energy and other shortage crises, it is difficult for us to believe that funding may not make an almost immediate recovery—may not be "just around the corner"—and that confidence in graduate education may not be returned just by willing it to be so.

Let's ask ourselves some of the questions Looney asks about "The Age of Scarcity," but apply them to graduate education: "Has the standard of living we have accustomed ourselves to gone up in smoke?" Has all of the material progress we have said resulted from graduate education (and I include research under the term education) been shown to be a myth? Has the image of graduate education as being an indispensable ingredient of human progress been tarnished beyond cleansing? Has the need for graduate education of the very highest order undertaken by the very finest minds of any generation been shown to be artificial? If we have less fuel and inadequate means of getting about, will we spend more time sitting in front of a log fire roasting marshmallows and talking with our family? If so, is that all bad?"

And he ends his article with a quotation from George Washington University psychologist Caldwell who said, "And when all else fails, man may even start reading and thinking *again*." Now the emphasis on "again" is mine. I'm going to put it in there, though. If he assumes that we aren't now, I'm glad that at one time we did. "So that man may even start reading and thinking *again*." Well, so much for the additions.

Now I am back to where I started before I read the November 3 issue of *The National Observer*.

I would like to begin this section of what I want to say with a quotation that is longer than I like but I do not know how to shorten it, and I will refer later to its source. "It remains true that what was once good work is always good work, and that an important part of good current work is the rediscovery of what was good about past work. I guess I'm trying to make a distinction between progress and fashion. Progress is the idea that when we see some way to make something better we make it new; fashion is the idea that whatever is new is also better. Progress includes the past in the sense that the new step is founded on the synthetic understanding of what already exists. Fashion ignores the past, and therefore is founded on ignorance. So it turns out that fashion is a kind of innovation which sees to it that nothing ever happens—in fact it often creates a cycle, by which what is fifteen years old is absurd while what is thirty years old is charming and worth a revival. The power of the idea of progress is in the notion that continuity is the condition of change."

My thesis: Confidence in graduate education will be regained; the good of the individual graduate student and of society will be best served; graduate education will fulfill its high mission—*only* through arduous effort directed toward the *master blending* of *tradition* and *innovation*.

The centipede was happy quite
Until a toad in fun said,
"Pray which leg goes after which?"
That worked her mind to such a pitch
She lay distracted in a ditch
Considering how to run.

I don't know who said or wrote these lines, but they come close to describing the state of mind of my early thinking about tradition and innovation in graduate education—and you may think it still does, except for one thing—I was and am convinced that it is *not either* tradition *or* innovation, but that the emphasis must be on the *master blending* of the two.

For the past several years I have read and heard many people talk about what's wrong with graduate education and how innovation, and specifically innovation completely severed from all past ideas about it (except perhaps the justification for generous funding of it) is its only salvation. I had begun to be both intellectually and emotionally afraid to mention the term tradition, or to imply that *some* of the "good" of graduate education might really have some roots in what took place prior to the 1960's.

But, as I began to think about my theme relating to tradition and innovation, and to look for ideas about them expressed by other people, I was surprised in much the same way I had been when in 1957 I bought a 1937-model Plymouth (and I wish I still had it). At the time I bought it I could not remember having seen a 1937 Plymouth—maybe since 1937. But on the two-mile drive from the automobile agency to my house I saw seven. All of a sudden my awareness of 1937 Plymouths was causing me to see them.

Similarly, as I said before, earlier this year I was of the opinion that if I talked about tradition and innovation in graduate education, I could "plow new ground." Not so! It has been surprising to me to find that many people, in education and out, were talking and writing about innovation, creativity, new values, old values, loss of values, elite, egalitarian, the melding of the good in all for the good of all—even to find that one of the five committees commissioned by the University of Chicago to report to President Edward H. Levi was the Committee on Tradition and Innovation. "All five committee reports are to be found in the April 21, 1973 issue of *The University of Chicago Record*, and I highly recommend them as enlightening reading. The quotation which I used earlier came from this report.

I certainly have no intent to try to note all of the so-called innovations currently being suggested for higher education in general or for graduate education in particular. Right here I want to put some parentheses in what I'm saying. It may well appear that I've had the next plenary session in mind when I concocted these remarks. Not so. I have only in the past day read the report which will be discussed at the next plenary session, and so I am not trying to anticipate it; I'm not trying to introduce; I'm not trying to influence anybody's attitude toward it. It may be that I will talk only about symptoms. But at least I take note of two pairs of ideas currently getting great play in the literature of higher education, in the speeches being made to groups interested in higher education, and in the casual and not-so-casual conversations among graduate deans.

One such idea has to do with *excellence* and *equality*. Clifton R. Wharton, Jr., President of Michigan State University, has said that "one of the most serious questions we face today, not only in the world of education but throughout society, is: "How can an egalitarian society validly and justly make distinctions of excellence among its members?"

One day last week the *Christian Science Monitor* quoted a member of the British Parliament as saying that higher education must now be considered a right. Is graduate education a right or a privilege? In its early existence, wealth or family position or sponsorship by a person or organization were the bases for admission. Later, largely subjectively, colleges chose those students they "felt" to be the brightest and most highly motivated—Reisman refers to them as an "aristocratic meritocracy." As numbers of applicants increased, admission came to be increasingly based on the somewhat more objective measures of grades and entrance examinations—undergraduate grades, GRE or Miller or other test scores, letters of recommendation. The best way to graduate a bright class was to admit a bright class. (the concept is quite different when we say, "The best way to guarantee an 'A' graduate student was to admit one who has been a 'C' undergraduate student.")

As both the concept and the fact of open admission have come to the undergraduate college, so also, many believe, has the graduate school been labeled elitist, undergraduate grades and test scores have been attacked as unfair and non-relevant, graduate student support has come to be based on financial need more than academic potential, and various academic requirements have been diluted.

Writing to this point, both positively and negatively, Richard Baldwin, Professor of American Literature at the University of Washington, says that "with the democratization of the bachelor's degree, graduate study has had to function as the preserver of privilege, but now the democratization of graduate study is well-advanced. With the imminent democratization of the Ph.D., American education has reached its Pacific Ocean."

Has it, indeed? And if American higher education has reached its Pacific Ocean, may this not in fact represent the greatest challenge in its relatively short history? It did not take long for it to get to that jumping-off place or stopping place, if we were to use Professor Baldwin's claim. If traversing the Pacific is now the problem, why not assess how it got there and determine what of the old and what new are required to go over water rather than over land, and start.

Patricia Cross has said that, "The new clientele in higher education in the 1970's consists of everyone who wasn't there in the 1940's, 1950's and 1960's. . . The most common position among faculty who consider themselves enlightened is that higher education should be open to all those willing and able to do the work *in the manner and form in which it is now offered.*" [Emphasis mine] Still quoting, "A second position is taken by a growing minority of misguided liberals who are willing to lower the standards of academic education in order to get credentials into the hands of the so-called 'disadvantaged' so they can obtain the material and social benefits of society."

"Neither position is adequate for these times. . . ." Listen to Patricia Cross' challenge: "The purposes of education [in these times] is to maximize the potential of each person to live a fulfilled and constructive life. And to accomplish that end we need not lower standards. Quite the contrary, we should organize education around the premise that we must demand of each student the highest standards of performance in the utilization of his or her talents."

Now, this is simply putting into easily understood words ideas which have been around a long time—ideas which have proved very difficult to get into undergraduate education and even more difficult to get into graduate education. And, yet, if we begin to look at the literature on this topic, look at the things that have been written by our contemporaries with relation to it, we will come away I think with the absolute conviction that there is no conflict between these two points of view.

Dr. Steven Muller, President of The Johns Hopkins University, emphasizes this point of view: "A return to reason and standards in American higher education requires a rediscovery of the fact that human talents and intellects vary, but that individual worth and merit bear no necessary relationship to orders of talent or intellect." [Notice the use of words: *return, rediscovery*—innovation through tradition?] "So, while the major graduate research university will require an academic clientele of exceptionally high intellectual order, this does not make of the university a 'better' institution than the community college, only a different one." Thus, "intellectual standards required of necessity in the major research university are not inevitably relevant in the community college, which instead requires standards of its own, appropriate to its mission and clientele."

Tradition or innovation? Not capable of being accomplished? We have known plenty. We have known success. And I submit to you that we now know that because we have done what many thought to be impossible in the past, we must know that we can meet new challenges as well.

Wharton agrees: "I am convinced," he says, "that those who are dedicated to equality have no real quarrel with excellence. Yet sometimes they misunderstand one another. Proponents of excellence fear the obliteration of individuality and of distinctions and rewards based upon objective merit, while egalitarians fear and resent the rigidity of absolute or inappropriate standards that perpetuate social, economic, and intellectual elites."

Someone has said that "one of the greatly disturbing possibilities in the egalitarian model is that it breeds mediocrity, or worse, ineptness and false certification."

But Wharton says—listen to him: "Thoughtful egalitarians do not champion mediocrity, . . . proponents of excellence do not demand an intellectual oligarchy. . . . Excellence and equity are, in fact, inseparable. Without equity of opportunity and measurement, there can be no comparability;

in such cases, 'excellence' is robbed of its meaning—reduced to just another human arrogance. Likewise, excellence provides the indispensable ideal toward which equal opportunity and proper standards must aim if equality is to have full social meaning. Excellence and equity are symbionts—neither is whole without the other."

And there, maybe, I should let excellence versus egalitarianism rest. I cannot resist, however, one further statement regarding excellence made by T.R. McConnell, founder and former director of the Center for Research and Development in Higher Education, University of California at Berkeley:

"At stake in the survival of the elite university . . . is the maintenance of that 'thin, clear stream of excellence' which supplies the new ideas necessary for the development of a more humane, just, and civilized society. . . . It entails intellectual interchange between able, highly motivated students and more experienced scholars in an institution heavily engaged in graduate education and research. . . . The vitality of these institutions is essential to the continuing flow of the intellectual capital on which the solution of complex human problems depends and which the attainment of civilized values requires." Innovation or tradition?

Let me briefly explore a second pair of questions which I believe are of very great significance to graduate education and to higher education in general: Must higher education at any and all levels be career (vocationally) oriented, or is it still possible that higher education has merit in its own right? Is all of innovation on one side of this question and all of tradition on the other?

James Hitchcock, professor of history at St. Louis University, writing in *Change*, says: "The mystique of innovation is at present a formidable one, and nearly any educational philosophy that diverges from the traditional can expect to gain a following and a measure of credibility. The key to the present educational confusion is the fact that, for all the ridicule that has been heaped upon the concept, there is no longer any pedagogical absolute except relevance. . . . The greatest irony of the educational history of the past decade is the fact that relevance has now turned full circle and is coming to apply precisely to what five years ago almost everyone agreed was fundamentally the wrong function of higher education—'processing students for the System.' In short, the newest version of relevance is vocationalism."

And this term "relevance"—does, as Enlau says, "breed its own destruction" because of its highly subjective definitions and its easy 'responsiveness' to the mood of the moment."

How often do we assess the "relevance" of graduate education with employment, especially with employment consistent with the level of degree held?—the Ph.D. cabdriver?—Should entry into a particular program leading to the master's degree or to the doctor's degree be determined largely by the immediate job opportunities—and even these at certain specified levels? To what extent are we "processing" rather than "educating" students?

Innovation or tradition?

Or, as Muller inquires, is higher education "an investment in the developing human personality" and "not linked inevitably to vocation?"

And he answers his own question: ". . . an educated person can enjoy his or her education regardless of vocation. The primary rewards of higher education are personal and subjective. In this sense almost everyone either needs or can use higher education, whether it is needed for employment or not. . . . There is nothing higher education can or should do to guarantee desirable employment to college or university graduates, but surely the time has come to rediscover the virtues of higher education that are not related to employment."

I believe higher education can and must serve both purposes—career and personal. I would submit that the most innovative, creative thrusts of higher education might well be in the direction of putting these two purposes back in perspective.

It seems to me that Wharton "puts it all together" when he says that one facet in the identification of institutional excellence is "the way in which it combines creativity, innovation, and a sense of excitement with a deep respect for values which have demonstrated enduring worth. . . . Yet, while the university should renew the vitality and relevance of its programs through innovation, it should lend a keen ear to the voice of the past. Traditional goals, methods, and values must not be buried before their time, lest we subsequently find ourselves compelled with chagrin to reopen their graves."

And so, in the case of two pairs contributing to a third—*excellence* and *equity*, *vocational (career) education* and *personal (liberal) education*, *tradition* and *innovation*—neither part of either is likely to be at its best without the other. Shakespeare almost always has an appropriate statement. In *The Tempest*, Shakespeare has Antonio say: "What's past is prologue."

In the University of Chicago Report of the Committee on Tradition and Innovation, which is written in the form of a conversation between the committee reporter and a research visitor who is infinite in time and space, we have this conversation.

(Before I read that conversation, with which I will close, let me repeat the theme with which I started: Confidence in graduate education will be regained; the good of the individual graduate student and of society will be best served; graduate education will fulfill its high missions—only through arduous effort directed toward the master blending of tradition and innovation.)

Now the conversation between the committee reporter and the researcher-visitor. The visitor is saying: "You've been on the defensive for so long—you've spent so much energy refusing to be what you are not—that you've forgotten to think about what you are. In a way you miss the barricades; they give you a perimeter and some self-definition. Now that the pressure is off you could do some hard thinking about your own purpose. Which is, of course, more difficult than self-defense."

"That," I [committee reporter] said, "is what my committee report was supposed to be about."

"In that case I can do nothing better than to leave you to it." He stood up.

"What shall I say?" I asked.

"About tradition and innovation? What can you say? Everything and nothing. That's not a question, it's a rhetorical topic, useful in the discussion of any question. Tell them there's no reason to think there have to be changes—except in the sense that there always have to be changes."

"'A state without the means of some change is without the means of its conservation,'" I said.

"Who said that?" asked the researcher.

"Edmund Burke."

"Oh, yes. A clever fellow. A bit unsteady though ---"

David R. Deener

Thank you very much Dean Cobb. I thought there might be a simile in the cities in which we hold our annual conventions. Last year we met in New Orleans. This year we are gathered at Williamsburg. Next year we go to Phoenix, and who knows, we may arise from our own ashes.

The next item is the introduction of new institutional members. Since the 1972 annual meeting, the following institutions have joined the Council: Arkansas State University, California State Polytechnic University at Pomona, Hebrew Union College, the Medical College of Pennsylvania, Pratt Institute, State University College at Fredonia, Tennessee State University, University of Illinois Medical Center, and the University of Missouri at St. Louis. This now brings the membership of the Council to 311.

Second Plenary Session
Panel on "Scholarship for Society"

Wednesday, December 12, 1973, 10:00 a.m.

Presiding. J. Boyd Page, *Council of Graduate Schools*
Michael J. Pelczar, Jr., *University of Maryland*
Ralph E. Morrow, *Washington University*
Joe N. Gerber, *Stephen F. Austin State University*
Jacob E. Cobb, *Indiana State University*

Michael J. Pelczar, Jr.

As past chairman of the Graduate Record Examinations Board, I would like to take this opportunity to point out to you that the report we are discussing is an example of a collaborative effort between the Council of Graduate Schools and the Graduate Record Examinations Board. In the fall of 1971, just about two years ago, the Executive Committee of CGS and GREB agreed to undertake the study. This study was funded by the Graduate Record Examinations Board; staff was provided from ETS. The talents and resources of CGS, GREB, and ETS have contributed to this report which is now in your hands.

The charge of the Panel, as stated in the report, is "what graduate education is" and "what it could be." I think it is important to bear this charge in mind, together with the fact that the central issue for the Panel was how and what changes should be introduced rather than whether changes should be introduced. And the word "change" I think needs some qualification or interpretation. As the report states, change should evolve from knowledge of what must not be lost—and I repeat that—what must not be lost. We recognize, and correctly so, that there are many strengths in the present system of graduate education that need to be maintained and strengthened. I am inclined to believe that when we talk about change some of us both in and out of graduate education assume that we are talking about discontinuing what we are doing and introducing all new. This report deals with alternative ways of accomplishing what is judged as the desirable goals or objectives of graduate education. Now I think it is important to keep in mind that we are being presented with recommendations for graduate education that represent additional options for the student, alternatives to present practices. No one with qualifications to express a judgment on graduate education would deny the success of our past accomplishments. This has been documented on many occasions, in publications and speeches, and we can take pride in what has been accomplished. But these are past accomplishments. The present situation presents us with many new problems, and it is in this report that the panel directs our attention to new options.

Some of you may have seen the recent report of the President's National Science Board. Among the data that are included in this report are results of a survey of a representative sector of society in which an assessment of the attitudes is determined for responses to research, science, technology, etc. A very large percentage of the group that was sampled expressed skepticism about what we would judge to be desirable scientific and technological objectives. The results of this survey have been editorialized in *Engineering News*, *Science*, and other publications, all noting that a sector of the public has reservations concerning achievements of science and technology.

As I look at the Panel's report and recommendations—I will speak now to the recommendations section of the report—the major thrust of the more nontraditional recommendations is directed toward the objective of establishing a better partnership between society and graduate education, and this goes all the way from the student to the professor to the research subject area and the environment in which the research is performed. All through the report I sense that the recommendations strive to bring about a closer partnership between each of these. Some, not all, of the recommendations represent substantial departures from what we now regard as standard operating procedure; and I suppose it is going to test our courage as to whether we adopt some of these recommendations. Additionally, some of the recommendations are made with the proviso that adequate information is not available presently to guarantee that the recommendation is likely to be successful. Stated another way, it will be necessary for those of us in graduate education to develop experience and to perform some experimentation to acquire the evidence that will assess the value of some recommendations.

There are 26 specific recommendations in eight problem areas in the report. The first recommendation of the subject "Admission" reads as follows: "Graduate institutions and programs should undertake now to arrive at publicly articulated statements of their goals and functions. The statement should reflect (a) awareness of existing department strength and weaknesses, goals and functions of major institutions; (b) the results of intensive faculty administrative consideration of possible new directions for institutions that could assure them a significant identity related to their major resources." And, on the implementation of this, it reads: "The force of realism is necessarily harsh. It asserts that graduate institutions are not exempt from the thrust of a new principle of accountability. Graduate institutions that do not define special roles for themselves, demonstrate their commitment to these roles, and establish a particular capacity to fulfill them, are likely to find one or another of their undertakings rated inessential by state coordinating boards or other consultative agencies. If the institution does not arrive at a clarification of its own appropriate mission in light of resources and goals and competition, the clarification will be effected by outsiders." I think that all of us from all the states are aware of developments presently underway between state coordinating councils and the institutions of higher education. The requirement for coordination, accountability, non-duplication, demonstration of need, availability of resources—these and more criteria are being exercised by state councils.

On the subject of "Access to Graduate Education," I will skip the specific recommendations but read the commentary. "Graduate institutions must begin to break free from the stereotypes that have, until now, governed thinking about the part-time student. In the past, this student has been assigned inferior status, little or no financial aid has been available, and little effort or none has been expended in tailoring curricular patterns to his or her needs. . . . It is also essential that graduate schools begin at once to prepare themselves for the task of developing new admissions criteria, new ways of evaluating motivation and job achievements, better methods of adapting styles of instruction to individual ways of learning." Now, again, this is an example of where it behooves us to carry out studies, pool experiences, and documentation to justify this recommendation.

On the subject of "Nonacademic Experience as a Resource," the recommendation reads: "Graduate departments should develop non-degree learning sequences to supplement regular degree programs, and should propose admissions mechanisms that would permit mature professionals to reenter graduate education, in a second or new vocational area on a special basis." Under the implementation narrative and in the concluding remarks, the Panel states that "in the interests of protecting the graduate institution or at least some of its parts from the dangers of parochialism and isolation from society, this question must now be taken up in earnest."

On the subject of "Student-Faculty Relations," one of the recommendations states: "In every discipline, especially the Ph.D. level, graduate training should include for all candidates who do not already possess such experience a deliberate and significant component of discipline-related work outside the university walls." I recall on one occasion Senator Hubert Humphrey stated that some of the sociologists had better get out of the library for a while and go into the city and see what was happening. I suppose that the sense of this recommendation is to expose the student to "real" problems.

I would like to repeat that some of the suggested recommendations need to be experimented with before they can be widely adopted. But they are worth trying.

Well, as Boyd Page said in his remarks, "what do we do with these recommendations?" We receive lots of recommendations from many agencies and committees. We may react to them individually, or we may bring them to the attention of our graduate faculty and graduate councils. Perhaps each institution will initiate and adopt some of these recommendations. I would suggest, however, that this organization, the Council of Graduate Schools, after discussion of the recommendations, might assume a role of leadership in endorsing and promoting certain recommendations which we judge to be desirable for the enhancement of the goals of graduate education.

In my judgment, the Panel has provided graduate education with a great service by preparing this document. It is an eloquent statement on our health together with recommendations for improvements in the decade ahead. I hope that after a reasonable time for discussion that this Council will have the courage to grasp the initiative to endorse and promote many of the recommendations in the Panel's report.

Ralph E. Morrow

For several days I suspected that a conspiracy existed to prevent my access to this report. The report did not reach me until late in the week, and the *Chronicle of Higher Education* for some reason has interrupted my subscription. My original knowledge of the contents of the report consequently came from secondhand sources. Last week, and this reflects favorably on the diligence of student reporters and editorial staff, our campus newspaper carried a front page item on the report which was headlined, "Faculty Research, Writing Overemphasized: Grad Panel Concludes." The same day I received a call from a very dear friend of the University, who also had obtained access to the document. In the course of our conversation he mentioned the report and said that he derived from it the understanding that in universities there were too many scholars and too few men of affairs. By the end of the day I concluded that with friends like ETS and the Council of Graduate Schools I didn't need enemies.

All of this is a way of saying that the portion of the report which will be spotlighted is the section on recommendations for change. For example, almost all the coverage given *Scholarship for Society* in such a sober, matter-of-fact publication as *Higher Education and National Affairs* concerned recommendations for change. I wonder, however, if the only durable or, for that matter, the most durable portions of the report—and Boyd, this is what happens when panels are convened without agreeing on signals—will be the specific recommendations.

The recommendations encompass only about a third of the report and are embedded in certain themes. Although the themes are general, compared to the specificity of the recommendations, they strike me as highly significant for they carry large meanings. The first is timeliness. Graduate education is under study by various national panels, foundations, and government agencies, all of which have been free in issuing findings and writing prescriptions, sometimes conflicting. Amidst this cacophony of voices, it is important for graduate schools, through their constituted organizations, to speak clearly and firmly, because the largest reservoir of knowledge about graduate education resides here. This report demonstrates that graduate schools can speak collectively and, moreover, that graduate education is capable of looking at itself critically and assessing where it is and where it must go. To me this convincingly indicates a capacity for regeneration.

A second theme implicit in *Scholarship for Society* is that progress in graduate education is cumulative. It forswears any notion of return to the idyllic simplicity of the pre-World War II period, to choose a date arbitrarily. It repudiates, moreover, notions of retrenchment, of diminished importance, of retreat from the center of national life. In other words, the historical development of graduate education is viewed in the report as essentially irreversible. But more than this, the report is a reply to those who maintain that graduate education has expanded too rapidly or too haphazardly or in the wrong direction. While the report concedes that graduate education may have slipped out of touch with certain elements in society or slipped behind certain trends, the achievements of the last two decades nevertheless are regarded as enduring accomplishments and as firm foundations for further development. Graduate education is a process that has worked and can continue to work for the good of mankind.

Finally, *Scholarship for Society* is an invitation to remain open to the possibilities for change in graduate education. It radiates a mood of receptivity to change, and I say this as one who began reading it with some skepticism. And openness to change, we should remember, also is openness to the possibilities of graduate education and an expression of confidence in them. On the other side, unrelenting opposition to experiments, new departures, or to a continuing canvass of what we have been doing in order to do it better may suggest fear and doubt of the adaptive capabilities of graduate education. The report not only is free of such fear and doubt but it unmistakably affirms the regenerative capabilities of graduate education.

Joe N. Gerber

I expressed the same insecurity that has been expressed in this matter because quite obviously I for one have not had time to understand this report in detail. I admit that I am giving you some first reactions, and one of the first reactions I had was that of disappointment in the report. It did not tell me what to do, and I think maybe I wanted to be told how to innovate. A little more reflection and I feel certain that that would not have done because there are too many adaptations to institutions and too much individual thinking that has to be done.

All in all, I am now satisfied that it's a very worthwhile report and will do all of us some good if we pay some attention to it. Perhaps the most important aspect about it to me is that we must reassess. That's good. I think also it gives us the confidence to reassess. Now, I also expressed some insecurity because I represent an institution in which by and large we offer the master's degree as the highest degree. I say "by and large" because we do have some cooperative and joint doctorate programs and plans. So I get fascinated first by topic one, "Goals and Missions," which in specific recommendation number three says, "The major, comprehensive universities in a single geographic area, working with the state board of education or regional agency, should attempt to clarify mission and function of the graduate institutions in that particular area and should, in addition, propose a blueprint for cooperative relationships among all of the institutions in question." You would expect me to react rather negatively to that. I have had a good many years of experience in working with deans from doctoral institutions and find them pretty interested in protecting their own domain. I am not very much interested in perpetuating the domain of the other institutions in my geographic area. I think a much better approach to that might have been that the appropriate board organized for graduate institutions within a region should decide on missions and function.

However, that same recommendation does call for cooperative relations among all institutions in question. And it expands this as it goes along and asks that there be some guarantees of long-time cooperation which in an institution like mine is very important.

One major problem that I see for implementation of the report is to convince our graduate councils and our graduate faculties to think and to be flexible and to have the courage to change. I notice every time I come to this meeting or any other professional meeting that I learn a good deal, I think. I get motivated and excited and I go home. I find that nobody else left the campus. They did not hear this and they have not become very excited and if I'm not real careful I'll get cooled off before I get them heated up. There is an awful lot of work we are going to have to do with our graduate faculties.

Another thing I notice about the graduate faculty is that they believe the way they received their doctoral degree is the only acceptable way to do it. That is very difficult to change, simple as the idea is and suspect as it is.

I think also the accrediting agencies are going to have to accept more flexibility. They are likely to do it. They have been going more in that direction. This is also true of certifying agencies and, I would say, the coordinating boards. It's not just the simple campus scene that has to be changed.

An institution like mine is going to be concerned about how much we can go down the road as to what has been recommended here and still have the doctoral institutions accept our master's degree graduates into their programs. You can understand my insecurity all the way through because if we change as much as we should, we could graduate people that the doctoral institutions would not accept into the doctoral programs. This is a critical problem with us and another reason for working together as we go along.

The report recommends that community leaders and organizers be considered as members of our graduate faculty and ought to do some work in the graduate structure. That is a fine idea. Many of us have wanted to do that for a long time but the difficulty is we cannot find the limits where these people are acceptable. Just an example, which may be extreme but it is true: We have a man on our campus who applied for membership on the graduate faculty and was not accepted; he doesn't have a doctorate but he has a rather unusual background otherwise. In one of our cooperative programs he applied to the cooperating doctoral institution and was immediately admitted to their graduate faculty. I think that is pretty indicative of what our master's institutions are, and for some reasons must be, that is, much more careful about this sort of thing than the doctoral institutions. We do not know how much they will accept.

I am glad to see that there is a recommendation on the course sequences and residence requirements being adapted to the needs of students. Let me read that recommendation. "Course sequences, residence regulations, and other institutional requirements should be adapted to meet the needs of students with family responsibilities, adult learners, professionals, those forced to pursue their studies intermittently, and others whose admission to graduate education have preferred patterns of study different from those regarded as standard." That seems to me to be a very worthy objective, something that we all ought to be doing, but it is going to call for more courage than some of our graduate faculties have.

The next item, "Graduate departments should seek by all possible means to open up effective communication with extension divisions." I think that is another aspect of the same thing. The energy shortage may hurry that along a little. It may be that we can go to them where they cannot get enough gasoline to come to us.

But I find—I do not know whether you do or not—a great deal of reluctance on the part of many graduate faculty members to go very far in either of these two directions. In the first case, they say, "I know what they need better than they know what they need," and in the second they say that all extension is weak, both of which of course are false but it is hard to get through.

However we interpret the suggestions of the report for boards of regents, coordinating boards, and legislators, we are not as free to change as some of us would like to be. I come from a state in which there is formula appropriation and, for example, our extension work is not supported at all by appropriation. So we get into a totally different pattern of support when we go in that direction. It is a direction we ought to go, but maybe we cannot do it and support our program.

I suspect we will follow my first impression for a while in approaching this thing. I have already ordered a number of copies of the report and will distribute them to departments and to the graduate council. I hope we can study the report together. I hope we can study it in concert with other institutions and in organizations such as this. I believe one of the greatest benefits the report provided will be to give people like me the confidence to reassess.

Jacob E. Cobb

I think you can understand why I waited to be last. The people before me have touched on most of the salient points. On top of that, you know what my bias is from my statements in the earlier sessions.

Before I get into that bias again, however, let me take the opportunity to get completely away from this topic and call your attention to the fact that Dean Charles Lester and his program committee have also tried some innovations this year. These innovations have come largely as the result of suggestions made by you. Dean Lester and his committee have taken these suggestions seriously, and let me just illustrate two or three.

This afternoon the workshop for new graduate deans, listed under master's institutions and doctoral institutions, is the direct result of a suggestion from you. Tomorrow morning the four discussion groups—evaluation of graduate programs, governance and organization, financing graduate education, and new developments in college teacher preparation—are also a direct result of your suggestions, as is the fact that these discussion groups are to be repeated on Friday morning beginning at nine o'clock.

So, what I am saying by calling attention to these innovations is that your suggestions do mean something and to ask you to continue to suggest. I am sure that your suggestions will be taken seriously.

Now back to this report. I want to say that, while I have not read it carefully, I am impressed by its rhetoric. It is beautifully written. It is well said. I do not think Dean Strehler will object if I refer to the conversation which I had with him this morning in which he indicated that Dean Brown had said—now we're getting down to third- or fourth-hand. It might well be that in order for new things to really get into common usage there will have to be a considerable overdoing, a considerable over-kill, in order for some residues to remain. And I suspect that the recommendations section of this report may in fact impress some people in this fashion. If so, it may well be that this is either intentional on the part of the panel that did the job or, whether intentional or not, may in fact serve a very excellent purpose.

The second thing I want to say about this report is that I am intrigued by the title, "Scholarship for Society." I am intrigued by the two words "scholarship" and "society." Scholarship has a great many capacities for interpretation, and it appears to me that it doesn't really matter whether you talk in terms of scholarship as a cloistered something or scholarship as an outgoing something. Scholarship nevertheless, in the final analysis, is scholarship and whether it is obtained in this place or that place or some other place must have some ingredients that just have to be there I think. I have pulled out of context another statement which I think has some meaning for me in this connection. "Years of serving must not be years of isolation." Agreed, I have taken it completely out of context, but I meant to. "Years of service must not be years of isolation." Now, I want you to think about scholarship and I want you to think about at least hours of isolation, if not years, and I want you to suggest to yourself that it is just entirely possible that here is a good example of oversell. I have a strong suspicion that if I talked personally with at least some of you I would hear you say that, "If I ever were a scholar"—I had better put this in the personal—If I ever were a scholar—and I emphasize the "if"—I think it was that period of time when in fact I was not isolated *through* scholarship but I was isolated in terms of the studying I was doing; I was isolated *with* scholars. And I think that is important.

I am also intrigued and delighted by the subtitle, "A Report on Emerging Roles and Responsibilities of Graduate Education in America." If things emerge they have to come from somewhere; they have to come from something and they have to come from somebody. So, regardless of what is said on the inside and how one interprets what is on the inside, if in fact this subtitle has any accuracy, these are ideas which have emerged from ideas. And of course, Dean Pelczar has already stressed the idea of alternate approaches—not *an* approach, not *the* approach, not even a new approach—but *alternate* approaches to graduate education.

Let me just point to maybe two of the conclusions that are arrived at in the report. First: "Graduate study in every discipline, especially at the Ph.D. level, should include a deliberate and significant component of discipline-related work outside the university walls." This has been referred to earlier. In our institution we have a few programs to prepare, let us say, people for elementary school principalships. One of these we call our traditional program. The other is an experimental program which has been in effect two years, and is now in the discussion stage as to whether or not it will be continued. One of the major differences in these two programs is this very idea coupled with one other significant one, I think. The selection of people for admission to this program is done largely by practicing superintendents and principals, from people in their own school systems. Secondly, every single person who is in this program must spend at least two semesters in internship basically in his own school system under supervision by his superintendent and/or principal and by our cooperating staff. Maybe we have overdone, but as we have talked about whether or not this program is to be permanent, several considerations have come into the picture. First, if it is as good as everybody says it is, including the people who have been through it, then why keep the traditional one? That's a really good question. But there is one other point that gets into the picture that answers that in part. It costs money as does the average research and internship. And my judgment is that as we begin to look at this particular recommendation we must also put it into the perspective of whether or not we can afford it. What can we uphold—less than that which we know is the best?

Workshop for New Graduate Deans

Wednesday, December 12, 1973, 2:00 p.m.

MASTER'S INSTITUTIONS

Moderator: Mary Evelyn Huey, *Texas Woman's University*
Panelists: Dale R. Comstock, *Central Washington State College*
Raymond F. McCoy, *Xavier University*
Phyllis W. Watts, *California State University, Fresno*

Mary Evelyn Huey

I want to welcome all of you to the field of graduate deans. Some of you, I know, are here as your first experience and I recognize also a few familiar faces. I am Mary Evelyn Huey from Texas Woman's University and have the privilege of chairing this session.

Three years ago I attended my first meeting of the Council of Graduate Schools in the United States and found it was the most scheduled, the workingest group of folks I had ever encountered. At that time we worked from about eight-thirty in the morning until ten each evening. You can see that there have been some changes in the arrangements of the program as of right now.

I came away from that meeting feeling a grave disappointment. I had been a graduate dean for three and a half months, had many questions, many problems, and discovered when I had finished the meeting that the people who had been graduate deans for years and years still had the same questions and the same problems. I did not find the answers I had come for then, but I did find some solace in the fact that the problems were not just mine and not restricted to the fact that I was new. But as I have stayed with the position—I am now in my third year—I have discovered that indeed there is not a specific hard and fast answer to any question in this area. We have to do a great deal of finding our way through problems as we come to them; and I have indeed discovered that the kinds of shared experiences and the kinds of guidelines that are available, which I have obtained from my association with this group, have really been quite valuable. I say this to you lest you come away from our meeting with the same sort of reaction.

From your requests, this particular panel has been established. This is the first year we have had panels for new graduate deans. There have been in the past—and I believe they have gone on now for six years—summer workshops of a week to ten days' duration. At the present time the question of whether a new one will be held this year is under consideration. If you are interested, we need to know. One of the reasons that it is being debated right now is the question of transportation. We do not know what it is going to be like next summer. But if you are interested and could find a week from your busy schedule—and they usually come in August—please let us know. The Council will try to provide one if there is sufficient demand for it.

We have three distinguished panelists this afternoon. The first is a lady from California; one of two people whom I met at the meeting I referred to earlier and who was gracious enough to sit down and talk with me for about two hours over an extended luncheon session to answer some of my questions.

She is a Californian who still is in California, a rarity, I understand. Phyllis Watts' three degrees in the field of English are from Santa Barbara, Claremont, and Stanford University. She is now at Fresno State as dean of the graduate school. She has been at Fresno in the capacity of English professor before she became Coordinator of Graduate Studies and since 1961 has served there as Dean of the Graduate School. She told me that for many years she was the lone major female administrator in the western part of the United States. She is now a member of the executive committee of AFGRAD which has taken her on some fascinating trips to Africa. She is chairman of the WICHE committee on minority education. It is my pleasure to turn the podium now to Dr. Watts, who will discuss with us administration and organization of graduate schools.

Phyllis W. Watts

I wish I knew what kind of administration and organization would be *the* ideal for programs offering master's degrees and not offering doctorates, or offering doctorates only in conjunction with other institutions. I suspect that among you there are probably some deans here who have perhaps three or four or five programs with a few hundred students, and I know that there are a few here with many thousands of graduate students and between thirty and forty master's degree programs; one of you, I know, is also engaged in joint doctoral programs. So, I am sure we have a very wide spread. This is my first dilemma.

The second dilemma is the fact that some of you are undoubtedly from private institutions where you have a great deal more freedom of operation and where your administrations undoubtedly do most decision making on the spot. And then there are those of us who come from systems in which decisions are rather heavily concentrated in a central office; much of the decision making on how things are going to be organized and structured is handed down to us, and we squirm within our bounds.

Before we start talking about some of the kinds of structures that could be established, we might take just a minute to look at what makes us unique, or different from the group in the other room. First, because we are not, for the most part, offering doctorates at all, though some do have joint doctorates, the master's degree program has usually been built on a rather long-established undergraduate program; thus we are in institutions, for the most part, where all of the machinery for operating the institution is geared to the undergraduate programs. The admissions office thinks about undergraduate students in all of the directives it sends out, all of the recruiting material that it sends out; all of the letters it sends out are geared to the freshmen, or, at most, juniors.

Secondly, the faculties in schools where the master's degree is the top degree very often have been recruited for undergraduate instruction, and chose to come to our institutions because they did not feel that they would be forced into the amount of research that is expected in a doctoral institution and because they rather like working with the younger students. Some of them resist the pressure to publish or to be held to account in their own scholarship.

When an institution tries to establish a graduate program with these kinds of constraints, it does encounter some restrictions on the kind of administration it can adopt for its graduate program. A much more centralized kind of control would be necessary in an institution in which the faculty are predominantly interested in the undergraduate program, but in which the newer faculty are recently out of doctoral programs and therefore concerned about their research and are eager to be involved in graduate programs. On the other hand, a degree of delegation of responsibility is possible in an institution in which there is a great backlog of knowledge about scholarly standards, and whose faculty are constantly engaged in research and are therefore subjecting themselves to the criticism of their colleagues. I know that there are institutions which have very highly decentralized programs, even in master's degree institutions. It may be that they have through the years developed sophisticated departments. I find that there are some departments in my school in which there is a very highly developed research and scholarly orientation, where all of the people in the department are engaged in continuing research, where they all hold terminal degrees, where they are all presenting papers and having them challenged, and are currently aware of what scholarship is all about. I know that there are also some other departments, particularly in some of the professional fields, where many of the faculty have terminal master's degrees and some of them even have non-thesis terminal master's degrees.

So, we have found, and I would suspect that many of you will find, that it becomes necessary to be extremely flexible in the organization, in the administration of programs—giving freedom to those departments who have a rather sizeable nucleus of faculty members who know what they are doing and are able to go ahead on their own, while maintaining the right to intervene if a faculty turns out not always to be knowledgeable—not always even able to serve as good thesis committee chairmen.

There are a few kinds of structural arrangements that help with this. One example, if you are in an institution in which there are members of the faculty who are reluctant to have graduate study in the institution—and, I assume, there are some in many of your institutions as there are in mine—then it becomes necessary to establish clearly who the people are who make the recommendations about graduate programs and who set the policies. We found it necessary to make some arrangements for identifying a consultative body. A person is eligible to be on the consultative body of our graduate school if he has taught a graduate course during the year just previous or if he is currently teaching a graduate course, or if he has served on a graduate committee or on a thesis committee during that time, and if he holds a terminal degree for his field, and if he has demonstrated continuing scholarship that is appropriate to his field. We send a list of these persons to the departments for their reaction. Occasionally, of course, very small departments prevail upon our patience and our kind hearts to let everyone in the department be on the consultative body, simply because it would leave one person out and would be very unfortunate for morale. By and large, however, only those who are involved are on the consultative body and are the ones who do make the decisions relative to graduate affairs. In our institution this is something over four hundred people. Four hundred is, of course, much too large a group to do any very important decision making. Thus, we need to have a liaison between our graduate council and this large group. The chairmen of the graduate committees of all the programs serve as this liaison. We call this thirty-seven member group the graduate forum. They are the ones who meet periodically to react to things the graduate council proposes. They are supposed to be our watch dog, raise issues when they think anything is happening that shouldn't be. They are the ones who elect the members of the graduate council; they are the ones who deal with all information that is sent out for dissemination among the consultative body. This plan has worked well for us. The council, then, is the body that makes the actual recommendations.

One other way in which the structure is important is the graduate dean's relationship to other deans. It is commonly said that graduate deans are deans without portfolio; they are deans with responsibility and obligation and no power; they are deans with faculties but no budget; they are deans with research but no space. We could go on and on. Therefore, it is rather important to have some kind of pronouncement of what your role is, particularly your role *vis à vis* the other deans or division heads or department chairmen or however your institution is organized. On graduate matters it has to be very clear that you, the graduate dean—the graduate office, the graduate school, whatever your graduate division—is not only responsible for all graduate matters, but that the dean, as a courtesy will discuss graduate matters with the school deans whom they effect, for their ideas. Whenever something is about to happen that could be critical—to get to them first and not let the matter hit them cold. This kind of courtesy can smooth away many potential problems. I have seen a number of places where the graduate dean and the school deans were at loggerheads. There is, as you probably have already discovered if you have professional schools in your institution, a very great drive among many of the professional schools to separate themselves from the graduate school itself. Some of the accrediting bodies want the professional schools to be answerable to the president only; this does sometimes pose a problem. I thought it might be important for you to know that this is not a peculiar problem, that it is a universal problem, and that it is extremely important for the smaller graduate schools to try to keep all of the programs siphoning through the same kind of procedures rather than to make a distinction between professional and nonprofessional. Otherwise one department after another will push for the same freedom to go its own way also, and eventually each program becomes autonomous. If all your staffs are experienced, completely competent, perhaps some decentralization may work well, but if it is necessary to ride rather close herd on admissions, for example, the graduate dean must be able to intervene. Suppose the department is on the ragged edge of not having enough students for a viable program; the temptation becomes great to bring in students who do not meet the quality standards that you want. It is quite all right to bring in students occasionally who do not meet all your criteria if there is also provision for bringing them along to the point at which they will be able to perform, or if you keep them in some kind of developmental status until they demonstrate proficiency, and if the instructors provide extra instruction; this, however, should be a policy decision, not whim or default.

There is one other rather important aspect of organization I should like to touch on. This is provision for making our strengths known outside the small circle with whom we regularly communicate. The fact is that we who are in the master's degree institutions tend to feel a little insecure in these large meetings with all of the deans of doctoral programs. Just often enough to keep us reminded of second-class citizenship, one of our colleagues makes a statement that reveals the regard in which our institutions are held by some. For example, about two weeks ago I sat in a meeting in which a man whom I respect very highly was advising people from other countries that when their candidates came to this country for master's degree study—and this program doesn't provide any doctoral studies—they really should go to the institutions that have doctoral programs to be sure they wouldn't be shortchanged. This is something that we have a real obligation to refute. I am completely aware, and I am sure you are, that there are some substandard master's degree programs. But I am also convinced that there are many master's degree institutions that give their students far more tutelage, have far higher standards for them, and demand a much more creditable job of research than do some of the doctoral degree institutions that are putting all their eggs in the doctoral basket and think of the master's degree as a consolation prize. Because the master's degree is the highest degree we offer, we tend to focus our scholarly efforts on that degree when we have the staff and facilities to do so. Well, so much for the shot in the arm. The important point is that if our programs are not academically sound we should not be offering them, and if they are we should have a variety of mechanisms to make that known.

Now, let's get down to just a few details. I talked about the structure of a possible organization. The important thing is that the structure be one that is appropriate for your institution and for you administrative style. If you tend to be a very autocratic person, you will need one kind of style. If you tend to make your achievement through persuasion rather than regulation or fiat, then you will need a different kind of administrative style. The important thing is early to establish the impression among all of the people with whom you must work that you are intensely interested in their programs, aware of the strength of their programs and, when you find weaknesses, that your role is to try to help them overcome these weaknesses, not to try to cashier the programs. My way of doing this is to get around the campus a great deal, always to have lunch in the cafeteria, always to make a point of sitting with different faculty members who are on graduate committees. Out of these contacts I discover a great deal about what the faculty are worrying about, what they are proud of, how their students are getting along—all kinds of things that help me to know where I need to put my attention. You will have other administrative styles.

One element of administration that is coming to be more and more important at this point is the gathering of data and the having of that data ready to pull out at a minute's notice. Your crises occur without giving you time to go back to the computer center or the records office or your files to tabulate this's and thats's for answers. Your faculty, if they are like most faculties I know, are inclined in their committees to make decisions by what feels right rather than by what they know about the students or student performance. For example, I am constantly fighting a battle on using GRE scores. A department will say, "We voted to use 560 this time." Well, what is 560? How does 560 measure their students? Why do they pick 560 rather than 580 or 540? For these kinds of judgments you need to have the data to pull forth to respond quickly before the faculty get too far with their recommendations, so that you are not in confrontation with them but rather are helping them to set goals consistent with sound graduate standards and to achieve those goals. This is much easier said than done, of course. But, working out some kind of system for recording students' records and hurdles along the way, so that you have the kinds of information that will let you know what would happen if you were to raise the grade point average for admission by .25, what would happen if you lowered it by .25, what would happen if you used another measure rather than the GRE or if you didn't use anything. These kinds of information you do need to have available rather quickly.

Another kind of information you need to have available is enrollment and cost information. This is even more difficult. Most of your records offices or computer centers or institutional research offices do have the enrollment information, but it is sometimes difficult for you to get. It is very important to work out some kind of arrangement with whoever does prepare reports for your institution to send certain reports to you just as a natural, logical, automatic operation. Once you receive the reports it is just as important for you to work out the way in which you wish to have them available and visible. For example, behind my desk I have a great big circle graph in which I have plotted the enrollment by fields through the years and then have overlays so that I can show faculty-student ratio by field, number of degrees granted by field, and the amount of money spent on equipment by field, and a variety of things of this kind, so that when a crises arises and I am having to respond immediately, I have something to go to. Unfortunately, as we have more students, as programs become larger, as we appoint more committees, as we receive more questionnaires to answer, as all kinds of things happen, it becomes harder and harder to keep these charts up. I am one year behind in recording my data right now and am becoming very much embarrassed about it.

Another kind of information that is extremely important for you to have—and this is for your all-college committees—if you have to go before academic senates to justify programs, to initiate new programs, or to cashier programs, or whatever, it is always good to know where you stand, where your institution stands in comparison to others. A few years ago I made an analysis of where our institution stood with respect to 55 other institutions of the size that we were then up to the size that we anticipated being within five years. We made a bar graph on eleven measures of quality. That graph also sits in my office in full display It has been used for everything under the sun, from recruiting new deans for new schools, to convincing the academic senate that we should think about a possible joint doctorate in the future, to persuading the library that we needed more periodicals, to persuading the chancellor's office that we needed more graduate assistants. These kinds of aids are extremely useful.

The final, really important concern is cost. As institutions are moving into programmed budgeting, cost-benefit analysis, all these stock phrases that we are hearing so much about now, it is almost impossible to really identify graduate costs, to separate them from undergraduate costs, from research costs, from service-to-the-community costs, from various kinds of costs. And for this too complex matter to discuss in the time we have, I would like to call your attention to the publication, *Costs and Benefits of Graduate Education, A Commentary with Recommendations.* It is by Joseph McCarthy and David Deener. This is their last publication, I believe, of a series resulting from the graduate cost study sponsored by CGS. I repeat the title, *Costs and Benefits of Graduate Education, A Commentary with Recommendations,* by McCarthy and Deener. It has much wisdom and a few very good guides for how to set about beginning to identify costs of graduate programs. In the very near future every graduate dean will have to have this information. It will be needed as enrollments decrease so that you can know whether to phase out a program, how to cope with the crunch for faculty in determining whether or not to offer a given seminar. You need to know how much the graduate program is costing; you need to know how much the graduate program is contributing to the undergraduate program in providing additional students for courses that the undergraduate program needs, in providing graduate assistantships for cutting the cost of some of the functions in the undergraduate program—the list is almost endless. You need to begin collecting cost data at once. The best study I know of at the moment, aside from the study I just mentioned is the one going on at WICHE (the Western Interstate Commission for Higher Education in Boulder, Colorado). There are many references to that study in the GRADCOST Study.

Then, one final concern is that of formal program evaluation. I am not going to talk about that at any length; I will just tell you this. We are currently in our third year of program evaluation. At the end of this year we will have evaluated 21 programs and we think—we aren't sure, but we think—we are onto a pretty good system. I brought some forms along, the guides that we use, in case any of you want to ask questions about them.

So, with that I shall close with the idea that the most important task of a graduate dean is to be sensitive to the feelings of students and staff, and to deal with problems creatively, with persuasion despite a lack of power, and with a style that is appropriate to him and his institution. There is no single right way.

Recruiting and Admission

Dale R. Comstock

When Dean Lester called a few weeks back to request my participation in this panel, I felt honored and appreciative that CGS was beginning to recognize that many of its members were institutions that did not grant the doctorate and, as such, have different problems and needs to which CGS can and should devote some of its attention. I hope this trend continues in the future and I am sure that many of the master's only institutions that are members of CGS would agree with me on that. I do not mean to imply that there is not much to be learned from the doctorate institutions, in fact, just to the contrary. Dean McCarthy of the University of Washington has been a wise and helpful counsel to me.

As a graduate dean going on four years, I do not pretend to be an expert on recruitment and admission, but I will try to present a few thoughts and information today that might be useful to you in your situation. I will talk only briefly about recruitment because I am going to state what little I know about it. It would be a much longer discussion if I were to state what I wish I knew about it.

If you are here representing a state institution (and this may be true in a private institution as well), I suggest that you carefully keep track and justify expenditures on recruitment, especially if you are competing with other institutions who offer the same or similar programs. In our state, a legislative appropriations committee is studying the use of state monies for such activities. In this time of economy for higher education, some are very concerned that tax monies would be used by two state institutions to compete for the same students.

Probably the most important publication that can aid in the dissemination of information on programs and the recruitment of students to them is the *Graduate Programs and Admissions Manual* published jointly by CGS and the Graduate Record Examinations Board. It appears in four volumes, one covering social sciences and education; the biological and health sciences; arts and humanities; and the physical sciences, mathematics, and engineering. It also contains information on whom to contact at the various institutions on questions of admission, financial aid, and so forth. It is entering its third year of publication and information for the next issue is being collected at the present time, and is to be reported to ETS in early January. If you are not already participating in that survey, I suggest that you contact William Craycraft of ETS at Princeton; he is handling the editorial work for the new edition of that volume. As this publication becomes more widely known, I believe it will eventually be the manual that is most widely used by advisors and students as they seek graduate programs to pursue.

Another publication from ETS that you probably should arrange to be listed in is the volume entitled *Graduate and Professional School Opportunities for Minority Students.* The fifth edition for 1973–74 has just been released a month or so ago. It is available from ETS and is free of charge for those requesting it.

I mention a few other publications that may be of assistance to you in recruitment. The Graduate Admissions Assistance Center of the Council of Higher Educational Institutions in New York City regularly distributes a list of candidates for advanced degrees including a special list for minority students. The list includes student's name, address, date of birth, telephone number, the degree he is seeking, the undergraduate college he attended, the gpa, major, GRE scores, and a short summary of the student's accomplishments. Another publication of a similar nature comes out of the American College Admission Center in Philadelphia. My procedure in handling these two publications is to review the lists and select students likely to be interested in our programs. Descriptive information and information about seeking application materials and/or the graduate catalog are forwarded to these students.

With respect to minority students, the Graduate Ethnic Opportunities Network under the sponsorship of the Western Association of Graduate Schools (WAGS) and the Western Interstate Commission for Higher Education (WICHE) publishes a minority student directory listing information for making contact with the students if your programs match their interests. This directory covers only the western part of the United States.

In addition, there is the Minority Locator Service of the Graduate Record Examinations Board which is nationwide in scope. Lists including mailing labels, I believe, of student names to contact are provided as part of this service.

It goes without saying that your own publications must be disseminated including the graduate catalogue, brochures on individual programs, and information on graduate service appointments such as TAs, RAs, and fellowships. In this connection I have found it quite important to require all departmental brochures to have the graduate dean's review and approval before publication and dissemination. It is surprising how much incorrect information is sometimes published. During my first year as graduate dean one department produced a brochure and disseminated it widely advertising an M.A. degree that did not exist, incorrect tuition fees and several misspelled words. You should also be alert to publications of the various disciplines that can be utilized in advertising your programs, e.g. the American Mathematical Society produces a special issue of the Notices indicating availability of assistantships and fellowships for graduate study.

Finally, probably the most important recruitment tool is the reputation of a program. The high quality program producing some highly successful graduates will attract others. I should also comment before I turn away from the topic of recruitment that I know very little about the results of efforts to advertise programs, and that is something that I plan to try to do something about in the future, to try to detect what it is that attracted a particular student to my institution.

Turning to the topic of graduate admissions, I am reminded of a story that Art Reynolds of Colorado, whom some of you might know, told at a recent meeting concerning a prerequisite of a graduate dean. It seems that a full professor at his institution had been away from the university for several years on government assignments and he returned intending to take up his professorship. He met with the department chairman and they discussed old times and how things had changed. Then the conversation turned to the reason for the meeting, namely, the professor's desire to return. Immediately the discussion cooled. The chairman explained that enrollment was down, the legislature had reduced their budget, and that there was no vacancy at his old rank. All this came as a great shock to the former professor. He then explained that he would accept an appointment at a lower rank, perhaps an associate professorship. But the chairman responded that there was no vacancy at any level. In utter dismay, the former professor said, "Well, I'll be an s.o.b." The chairman responded, "Well, why didn't you say so. The graduate deanship is open."

I am convinced that the graduate admissions function has a very strong relationship to the quality of graduate education in an institution, but the graduate dean is going to have to exert his prerequisites to see that the process is operating effectively. Let me briefly describe our admissions process to you. An application package consists of an application form, two official copies of the student's transcripts from other institutions, GRE aptitude test scores (in our case, the advanced test is optional by department), three letters of recommendation, and the student's personal statement of educational objectives and professional aims. All of this material is submitted in duplicate. One copy is forwarded to the department for review and subsequent submission of a recommendation on admission to the office of graduate admissions and records. The admission decision is reserved to me and admission is by letter from me. Let me emphasize that again. The admission decision is reserved to me and admission is by letter from me. I would advocate, whether you are autocratic in nature or not, that you try to reserve the final decision on admission in your office. Certainly the departmental recommendation on admission is very important and often determines admission; often my response is just to endorse the recommendation. But it is not final and I do not always concur with the department. I believe the dean should retain this role and use it to move the department toward giving the admission function the high prority that it requires.

As we move toward nontraditional grading systems, I believe that we should make increased use of the GRE and/or other standardized scores. A student with minimal letter grades on a transcript, that is, a transcript that has numerous pass-fail grades, no credit-credit grades, or S/U grades, also might have reference letters that do not really address his academic abilities. Such an application should probably be rejected if his GRE scores are not high.

An important facet of your graduate admission process must be an admissions policy that is fair and equitable and applies clear criteria. Irrelevant selection criteria such as sex or race obviously must not be used, and any criteria must be consistently applied. You probably have all seen examples where two students seem to have similar credentials but one is admitted and the other is rejected. A notorious example of this is the Defunis case out in the State of Washington which is now heading for the Supreme Court. It does not directly involve graduate admissions but it is a similar kind of situation with respect to a law school.

It is not an unusual happening nowadays that the response you receive from a rejection letter to a student is an appeal from his lawyer. I have received two such appeals just within the last year. But I have found that generally a careful response to such an appeal clarifies the matter and the student often has not fully informed his counsel as to what the reasons for rejection were and oftentimes it is a pressure tactic that the student uses in trying to reverse his rejection.

In this connection I call your attention to a news service just beginning called the Higher Education Admission Law Service. In fact, we received brochures from CGS just within the last few weeks. It is to be a looseleaf publication detailing the legal principles affecting all facets of the admissions process. It discusses the legal validity of substantive criteria and procedures currently used in admissions decisions and reports on the most recent developments in constitutional law, administrative law, and federal and state legislation that affect the admissions process.

Associated with the admission process, I second Dean Watts in that it is very important to develop a records system with easy retrieval to supply factual data for reporting, for various research studies that you want to do on your students, and for updating procedures. I have developed a graduate student action report form that serves to initiate and update a computer tape record that is becoming very valuable to graduate admissions and records. I illustrate it to you here. Essentially the gray line is the computer printout, the white line is used for making corrections and updating and they keypunch from this to produce the new record system. This has been extremely helpful in the retrieval of information about students in our graduate programs.

Each fiscal year an annual report is prepared from my office containing extensive data on graduate students and their programs, and in my state the requests to describe and justify what is happening in graduate programs have greatly increased as the coordinating council attempts to deal with duplication of programs.

In the case of admission of foreign students, special problems occur. A traditional U.S. procedure requiring the submission of complete credentials before a decision is made can be a great hardship for a foreign student. While you need a complete file to admit a student, you probably should discourage a foreign student on the basis of a partial file if there is information in it for doing so. For example, he may be applying for a program that may not be offered or he may have rather mediocre grades when they are translated into the American system. Otherwise, a foreign student may go to great relative expense and difficulty to submit GRE and TOEFEL scores. He may be in a remote location and go to a great deal of expense to submit such scores. I suggest that you use a preliminary-application system and also request, as part of that preliminary application system, information on how he is going to finance his education. If it is your practice not to grant teaching assistantships or other kinds of financial aid to foreign students, you should notify him of that so that he does not come expecting financial aid.

For other information on foreign students admission I suggest you contact the National Association for Foreign Students Affairs in Washington. They have recently published a report—it was published last year—on departmental policies and practices in relation to graduate education of foreign students. A big problem in examining foreign students' credentials is the equivalency of degrees and grades. As an aid in these matters I suggest the AACRAO World Education Series published by the American Council on Education.

Finally, I call your attention to the recent announcement on foreign credentials evaluation in the CGS newsletter. The National Liaison Committee on Foreign Students Admissions has announced assistance to institutions with small numbers of foreign students. The entire U.S. is being covered with four credential evaluation projects, one in the West, one in the Midwest, Northeast, and in the South, and there is a brochure at the registration desk where you can pick up more information about this.

In closing, a graduate dean in the latter part of his first year, which I assume probably most of you are in, may be cheerfully believing that he is finally understanding and getting control of his job. But I assure you, as time progresses and you flower among the thorns, your days will be filled with unexpected troubles and crises. A good graduate school is probably always in a state of tension and flux, and a good graduate dean has unexpected problems to confront each day. A fair dose of them, though not too many, for I am reminded of a story told last spring in San Diego by Dean Elder, of an American lady who while motoring through Greece saw the usual early evening outrage—the husband riding a donkey home and his wife dutifully walking behind. Indignant, the lady stopped and sent over her interpreter to discuss the matter. The even more indignant Greek wife angrily sent back a message to the American lady, "How would you like it if your husband came home at night too tired?" A graduate dean ought to come home reasonably tired if his school is alive and full of vitality and versatility.

Thank you for your kind attention.

Academic Standards and Degree Requirements

Raymond F. McCoy

My approach to limiting this extraordinarily broad subject is to tell you a bit about the particular graduate school in which all of my "deaning" has been done. That in itself is going to limit both my subject and your concept of what I may know something about.

It is an urban school offering ten master's programs. In the traditional disciplines, it offers six master's programs—economics, English, history-political science, psychology, mathematics and chemistry. In the newer and more professional fields, it offers the M.Ed., the M.B.A., a M.H.A., and an M.S. in corrections program. It is still growing—enrolling nearly 3500 students this semester in a small university where the undergraduate student body numbers about 1750.

Enrollments in the four professional training programs account for 3200 students; the other six programs have 270. Of the total, nearly 3200 of the 3500 are part-time graduate students. Many students come long distances each week to us. For example, over 200 from the Columbus area drive the expressway 200 miles each Saturday to the campus, and another 270 are enrolled in Xavier graduate courses held on the Ohio Dominican campus in Columbus.

One thing I know about are part-time graduate students since 28 years ago nearly all of our programs were designed for that group of students. And now suddenly part-time graduate students have, in theory at least, become an academically respectable subject to discuss openly before graduate deans.

Suddenly some of us find we have been all along where the action now is! And suddenly we have something to be interested in at CGS meetings. It is less comfortable. In Miami, I swam at the Fontainebleau CGS meeting; in San Francisco, I walked and took in Sausalito; in New Orleans, there was the Quarter. Here I may have to neglect the reconstructed Williamsburg. For suddenly, the climate of graduate education is changed, perhaps not because of the foresight of the philosophers of graduate education but because of a ratiocinating hindsight forced by changing circumstances such as less funds for comfortable activities and comfortable living; and studies of what college graduates may want; and awareness of what society wants and will support.

Culminating a flood of recent publications on graduate education, now comes the report of the Panel on Alternate Approaches, *Scholarship for Society*, which talks of "often rigid institutional requirements. . . become more flexible to meet the needs of new groups of students; of every graduate student being required to undertake discipline-related work outside the university if he has not done so;" and of "alternative standards of evaluation for graduate institutions not totally oriented to the standard of research eminence."

Dr. John D. Millett, then Chancellor of the Ohio Board of Regents in 1971, in an address to the graduate deans at the Midwest Conference on Graduate Study and Research, foreshadowed the kinds of changes ahead when he asked the question he said had been ignored for 25 years: For whose benefit do we seek graduate education—the student's, society's, or the institution's prestige?

I would suggest that from the answer to the question—for whom graduate education?—flows desirable new emphases on graduate education. Further, the answer seems to me to be in order of priority, for the student within a framework of society's needs and problems, and what is perhaps really new, only incidentally for the benefit of institutional prestige.

Once this kind of answer is made, then standards of admission, retention, dismissal, selection, grading, etc. should all be made with a focus on the student. Let me suggest some specifics on the basis of experience with them.

1. Graduate programs must be designed for employed students who will complete their programs in after-work classes. This means alerting faculty hired to staff these programs that their teaching loads will be heavily Saturdays and evenings, or more extremely, Sundays.

2. Because students are employed in the field, traditional criteria for selecting faculty have to be modified—excellence in teaching, practical experience, innovative techniques, etc. will weigh heavily. More part-time, experienced faculty will be hired.

3. Seminar essays, operational research projects, practicums, field projects, and internships will replace most master's theses when part-time students are envisioned.

4. Interest, motivation, experience, and commitment will increasingly be weighed in admission procedures, along with quality point averages.

5. The minimum criterion for admission to many programs is likely to be mere possession of the bachelor's degree.

6. No quality point average can rigidly be enforced, since (at least in my experience) God alone knows for sure whether any given applicant for admission with a low quality point average can or cannot succeed. Provisional admissions must become common. By provisional admission I mean admitted provisional upon receiving no unsatisfactory grade in any of his first two or three graduate courses. Decision making in the dean's office or department chairman's office is more complicated and personal if the focus is on the student who has some years of experience in the field.

7. For part-time students, administering the Graduate Record Exams because of the formalities involved, may be impractical. The Miller Analogies Test has some advantages: takes about an hour; can be administered individually and graded immediately to give input for the decision to admit or not to admit.

8. For the newer programs and more heterogeneous student body, a three level grading of perfectly acceptable grades for graduate credit works out better than the traditional two grades (A & B). Part-time students are not nearly so well known by staff members as full-time graduate students closely in contact with full-time faculty members. Therefore more requests for recommendations come in to the dean's office. A three point scale means that at least one can be sure that if a gift grade is given, it is a C and not a B.

9. Program design must be specific enough that guidance can be supplied in the graduate dean's office by a larger staff than usual who are available Saturdays, evenings, and during the day. They must be familiar with schedules and a variety of program requirements. For example, in my own office, with about 3200 part-time graduate students, the counseling of students is done by seven professional persons (the dean, associate dean, assistant dean, the director of the Graduate Business Program, the assistant to him, and the Chairman, Department of Education, and the Professional Secretary of the school are all physically located there for availability to students) all handling questions beyond those of the capabilities of the five secretary-clerks, if they drop in or telephone.

10. Once acceptance is given, registration procedures must be as simple as possible with heavy dependence on mail registrations. No questions asked unless absolutely necessary or for the convenience of the office staff.

11. All graduate school rules and regulations must be examined to see whether they conform with reasonableness. The test as to the reason why each exists can be made to seem sensible to the mature student who is paying his own way.

12. Part-time students need the freedom to decide up to the day the exam is to be held whether to change, to audit, or take a W without prejudice.

In all of this—the part-time student, new programs for him, convenient scheduling, new standards, clarity and reasonableness of requirements and procedures—the leadership of the graduate dean is necessary. Nothing happens in graduate schools without leadership. In new graduate schools and in newer programs, his leadership job is easier—unimpaired by clogged arteries, hoary traditions and vested interests. In older universities or more traditional programs, it is difficult because he is impaired by clogged arteries, hoary traditions, and powerful vested interests.

But if redirected emphasis is to be given to the student's needs (especially part-time students) within the framework of society's problems and needs, then vibrant skillful creative leadership by the graduate dean is absolutely indispensable—from describing programs in forthright English to skilled scheduling and to delicate pressuring for committed faculty.

From this kind of leadership, a new kind of institutional prestige is the reward, not the monopoly-in-restraint of trade prestige of the evaluation of graduate programs with which we have been regaled in the past; or the down-the-nose references to less prestigious institutions of some former CGS statements—*but* the prestige from the areas where accountability is primarily owed—the students, the community leadership, the government, and private institutions where passing the accountability tests means the future support of graduate education.

DOCTORAL INSTITUTIONS

Moderator: Sam C. Webb, *Georgia Institute of Technology*
Panelists: Robert F. Kruh, *Kansas State University*
Carroll L. Miller, *Howard University*
Herbert D. Rhodes, *University of Arizona*

Sam C. Webb

Good afternoon. I'm Sam Webb, and as you can see from the program I have been elected to moderate this session, the workshop for new deans from Ph.D.-granting institutions.

Some of us were talking outside just before this session began and we agreed that something new comes up practically every day in a graduate dean's office, so there is always something new to handle. If you are not a new dean and if you will stand by it's entirely possible you too will learn something worthwhile from this session.

This session is going to be quite informal. The whole purpose of it is to provide an opportunity for new graduate deans to profit from the experiences of some of our more experienced and distinguished deans who have been in this kind of work for quite a long time. We are going to have three short presentations and after the presentations are completed, we will throw the floor open for discussion and questions.

The first presenter this afternoon is Dean Herbert Rhodes. I am not going to give a long introduction of these individuals because I think we can use the time more advantageously in questions and answers, but briefly, Dean Rhodes is by training an analytical chemist and has had a long and distinguished association with the University of Arizona, as a student, professor, dean, and administrator. He has been graduate dean since 1957.

In addition to performing his duties at the university, he has been chairman of numerous committees on the regional and national level dealing with graduate education and its many problems. Dean Rhodes is going to speak to us on the general topic of "Organization and Administration."

Organization and Administration of the Graduate School

Herbert D. Rhodes

Perhaps the most immediate way to confront the problem we face in this discussion is to pose the question: "How in the world can you discuss the organization and administration of graduate schools when there isn't any such thing?" If you choose at random 100 different graduate schools, you will find 100 different organizational and administrative patterns. True, you will find certain threads of similarity, particularly among institutions of a similar nature, but the variety of detail is infinite. A great deal depends upon the nature of the institution and its traditions.

In this connection, let me quote a statement which sums up the problem very well: "The administration of the graduate schools in American universities that offer the Doctor of Philosophy degree presents one of the most intriguing problems in the realm of higher education. The position of the graduate school, whatever the university, defies brief definition. A most revealing statement is that in no two institutions does the graduate school occupy the same position and have the same functions. It may not be much more than a registrar's office, or, again, it may be denoted by an impressive building. In one or two instances, it has no more existence than a group of faculty with their students whose joint interests are made a matter of record in a place whence, on recommendation of the faculty, diplomas are issued at appropriate intervals. At the other extreme, its dean may serve on budget, appointments and promotions, and other administrative committees, rank other deans in the hierarchy, and attend trustees meetings. Each university has a history that places its graduate school in the unique position it holds. There is no uniformity."

The great variety in graduate school organization is due largely to the odd historical development which adapted the German system of specialization and research institutes to the already existing American universities modeled on the English system and consisting of a number of independent schools of medicine, law, theology, letters, etc. But with very little thought to organization and management, the graduate school was simply put on top, as it were, of the pre-existing schools (each with its own organization, faculty, budget, and curriculum), but with no faculty of its own, no budget, no curriculum, no courses. In contrast to most other schools and colleges, the graduate school has no disciplinary or professional identity. Its distinguishing characteristic is that of level, the maturity of its students, their degree of advancement, specialization, and sophistication in comparatively narrow fields of endeavor.

Originally the graduate school was a graduate school of liberal arts and a number of these remain today. But as the university has extended advanced work into fields beyond the liberal arts, there have developed graduate schools of business, graduate schools of education, and a variety of others. Programs in these schools are the responsibility of the dean of business or the dean of education, rather than the graduate dean. The development of the professional doctorate has led to the situation in a number of institutions where the Doctor of Philosophy in education may be administered through the graduate school while the Doctor of Education is administered through the school of education. The same schizophrenic approach remains at the master's level. On the other hand, the lack of uniformity which this inevitably involves has been substantially reduced by many institutions that have assigned the responsibility for all graduate work, both professional and scholarly, to a single graduate school. Even in these instances, however, the professional doctorates in law and the medical fields (such as medicine, dentistry, veterinary medicine, and a few others) remain the responsibilities of the appropriate professional schools. For this, the graduate deans can be thankful. The variety and intensity of their headaches are quite adequate without the additional complications of the professional doctorates in the health sciences.

So what do you do when faced with such a smorgasboard of infinite variety? The best answer would appear to be that you take from it what seems to fit best and what you can make work in your own particular institution with your own particular problems. Of course, a great many decisions have already been made for you by your predecessors. And many of these decisions were dictated by the nature of your institution. How well your system works will depend greatly on your president and how well he supports the graduate program as well as the traditions of your institution and the basic orientation of its faculty.

In pondering the question of organization, one is inevitably led to inquire: Just what is the basic function and responsibility of the graduate dean anyway? In a broad sense, it seems to me that the answer is very simple: namely, that the primary objective of the graduate dean should be exactly the same as the primary objective of every other administrator in the institution: to keep the teachers teaching, the researchers researching, and the students studying to the highest degree of effectiveness practicable. To do this, you may spend a great deal of time on routine matters but hopefully you will also be able to exert a degree of leadership that will continually urge your colleagues, both administrative and teaching, to continued or higher levels of academic or professional excellence.

But, within such a mixed up context, how do you get a handle on a discussion of organization and administration? It seems to me that in the few minutes available we might best consider briefly (a) the relationship of the graduate dean to the faculty, both teaching and research, (b) the relationship of the graduate dean to the students, and (c) the relationship of the graduate dean to the president and other administrators. With this in mind, I thought I would read once more an essay by Roy Nichols published some seven or eight years ago. The paragraph I quoted initially is the opening paragraph of Dean Nichols' essay and I was pleased to discover again that this paper is organized rather along the lines I have just suggested. I commend it to you as worthwhile reading. And if you are not familiar with the collection of essays entitled *Graduate Education Today*, edited by Everett Walters and published by the American Council on Education in 1965, I suggest the entire collection to you as very worthwhile.

Relation to the Faculty, the Teaching Function

While we cannot truly separate the teaching and research functions of the faculty, it may be convenient to do so for the purposes of discussion. Very few of the graduate faculty only teach; a few more may do only research, but most do both. Almost all of the graduate dean's faculty are formally attached to a department or other teaching unit which is part of another college or school under the direction of another dean. This is where the real control lies. The departmental budget is controlled by the other dean and the individual faculty member quite properly feels that his welfare is more closely associated with, or determined entirely by, the dean of his college. The graduate dean may or may not be involved. In many instances he is consulted and his advice is sought regarding initial employment, promotion and tenure and the like, but this is frequently merely a matter of tradition or perhaps simply sufferance on the part of the other administrator. While it is a tremendous blessing to be free of the budgetary and other fiscal problems faced by other academic deans, it is nevertheless true that fiscal control extends itself to other control as well and the lack of fiscal control puts most graduate deans at a distinct disadvantage.

An important question we all face is: Just who comprises the graduate faculty? It seems clear that doctoral students should be advised, directed, and taught only by those who possess a high degree of qualification usually demonstrated by their own doctoral degrees and/or published research or other evidence of scholarly or professional creative accomplishment. And the same principles should obtain at the master's level although perhaps not necessarily to as high a degree. Many institutions maintain a formally organized graduate faculty to which election or selection depends upon the individual's perceived qualifications and general peer approval. Frequently several different levels or classes are recognized so that some may teach or direct the work of master's candidates but not doctoral students, etc. In many ways such an organization makes for a ponderous operation and introduces other disadvantages which a number of institutions avoid by foregoing the formal selection procedure. It is important, however, in any case that only highly qualified members of the senior faculty be permitted to teach and direct graduate students and otherwise take part in the administration of the graduate program. Although both approaches to defining a graduate faculty have their advantages and disadvantages, the graduate dean should play an important role in monitoring the graduate faculty makeup.

In the more formally organized graduate schools, the graduate faculty may meet from time to time and establish policy and procedure in the same way that these things are done by the faculty of the undergraduate colleges. As institutions grow in size, however, meetings of large groups (which are usually very poorly attended anyway) become more difficult of operation and much of the policy making function of the graduate faculty may be delegated to an executive committee or graduate council. Council members are usually elected but one of the dangers of an elective system is that individual members may consider they have a direct responsibility to their constituents regardless of what the larger view may seem to indicate as being better for the institution as a whole. In matters of this sort, the personality and leadership of the graduate dean may be a particularly important factor in maintaining a smoothly operating program of high quality.

Regardless of the formal organization of the graduate faculty, it seems clear that the major control of graduate programs, specific degree requirements, and the like should remain with the faculty. After all, the faculty *is* the university. On the other hand, without reasonably well coordinated minimum requirements and regulations, an operation of any size can degenerate quickly to an anarchistic shambles. The dean and his executive committee or council should probably exercise a fair degree of control or command over the direction taken by the graduate program and the policies of the graduate school. But it is most important that the faculty have access to appropriate mechanisms for establishing or modifying basic policy so that the graduate program is really the program of the faculty and not that of a few administrators.

Relation to the Faculty, the Research Function

Everything mentioned above applies to the research faculty as well, whether they also teach or limit themselves to research. In addition, however, there is another factor that enters the picture; that is the matter of research funding. Even though the heyday of easy money through research grants and contracts may have passed, the extracurricular funding of research by government agencies and foundations remains a big business in most institutions.

Since faculty research is inextricably associated with graduate teaching and dissertation preparation, it was only natural that the institutional administration of research grants and contracts be made a responsibility of the graduate dean's office. This office frequently bears the major responsibility of checking proposals for institutional commitment, providing assistance to investigators in the preparation of proposals, and acting as a central depository of information regarding sources of financial support.

In addition to his function as a coordinator of grants and contracts, the graduate dean frequently has the responsibility of allocating institutional funds to individual departments or faculty in support of research. In this effort, he may be advised or assisted by a research committee of the graduate faculty.

Although his control of research funds gives him some degree of control over individual faculty that he otherwise would not have, he is well advised to be certain that the distribution of research assistance is made in terms of the scholarly, scientific, or professional merit of the programs involved. If he manipulates research funding in such a way as to use it as a political tool, he can soon lose the respect of his faculty colleagues and seriously damage what otherwise might have been a research program of high quality.

Relation to Students

The graduate student is most closely associated with the faculty of his major department, particularly his advisory committee and his thesis or dissertation director. This is as it should be; but there are a few matters, frequently of a rather routine nature, which are best handled for all departments through the dean's office.

Although the several departments should very likely have the major responsibility in making admissions decisions, final action on all applications should probably be taken in the dean's office in order to insure reasonable uniformity in the application of institutional policies, if nothing else. It is likely that the dean's admissions officer will seldom differ with recommendations submitted by departments that approach the admissions problem in a conscientious manner. Much of the function of the admissions officer and his staff will be purely clerical but the official admissions decision should remain within the dean's office.

Although the records of students' progress through their graduate programs may sometimes be kept entirely within their departments, it is probably wise for such official records to be kept in the dean's office. Therein lie the records of various educational credentials, examination and test scores, reports of successful negotiation of examinations (or sometimes the failure thereof), records of performance on language examinations and other degree requirements; and finally the fnal examination and dissertation defense for the doctoral student. These and other matters important to the student's progress should be coordinated by the dean's office so that he can eventually certify to the registrar that a student has completed all of his requirements and should be awarded his degree.

The dean frequently plays a central role in the award of financial assistance. Although not invariably the case, he or his associates (usually with the advice of a faculty committee) commonly have the responsibility of assigning institutional scholarships and fellowships to both new applicants and continuing students. The matter of equitable distribution of financial assistance among the several departments becomes particularly important in connection with the institutional administration of extracurricular funds coming from the foundations and government agencies. Although the need for such judgment has diminished compared to a few years ago, the NDEA Title IV, NASA and NSF programs offer outstanding examples of the necessity for an impartial agency to distribute funding in such a way as to best support the most deserving graduate programs and make awards to the most deserving students within those programs. This requires a close degree of cooperation between the dean's office and the several departments concerned.

The budget for institutionally funded graduate assistantships, both teaching and research, may lie within the dean's office and he may have the prerogative and responsibility of distributing assistantships to the several departments. On the other hand, teaching assistantships are provided so that the departments can discharge their teaching responsibilities. Since this undergraduate responsibility is not a concern of the graduate dean, teaching assistantships are commonly included in the departmental budget or in the budget of the appropriate college dean. But the awards are made to graduate students and the service responsibilities of these students have some bearing on the nature and magnitude of the academic load for which they enroll. For these and other reasons, the graduate dean must be involved in not only the record keeping but also the approval or disapproval of proposed appointments of specific individuals.

In a graduate school of considerable size each day brings a steady stream of students into the dean's office. Someone always needs help, or advice, or perhaps simply encouragement. There are sometimes bitter complaints against the faculty. And sometimes bitter complaints by the faculty against the student. Probably the least pleasant of all of the graduate dean's responsibilities is that of acting as referee in a dispute between a student and a member of the faculty. One is usually inclined to support the faculty and, indeed, it usually works out that there is more logic and justice on the instructor's side than on the student's. But this is not invariably the case. And as long as faculty members are human beings with their own emotions and prejudices, there will be cases of unfairness and discrimination against students and wrongs which should be righted. And even if the student is wrong, he deserves a thoughtful consideration of his complaint and a sympathetic explanation of the faculty's or the institution's requirement.

New Functions as Society and Institutions Change

Before considering the relationship of the graduate dean to other administrators, it might be well to recognize the ever changing context within which he operates. Many of his problems are old, frequently much older than he is. It is an interesting exercise to go back and read some of the reports of discussions of graduate problems in the 1890s. Every once in a while you will run across one that is still being debated today. On the other hand, the graduate dean must expect his administration to change with the times, sometimes radically within a short period. We have mentioned briefly the administration or coordination of research grants and contracts. Twenty years ago this was practically unknown. In recent years the tremendous increase in postdoctoral appointments has raised problems of conern to many graduate deans. The question of interdisciplinary programs at the graduate level becomes one with which the graduate dean must associate himself closely as a coordinator if nothing else.

New problems and emerging concerns could form the basis for an extended discussion. Suffice it to say here that you will probably run into a few during your tenure, however brief, that neither you nor anyone else can now anticipate.

Relationship to the President (Chancellor, Provost) and Other Administrators

The relationship of the graduate dean to other deans and academic administrators is probably the greatest puzzle of all. Although I should like to reveal to you some hitherto undisclosed wisdom and give you some sound and useful advice, the fact is that by this time you can very likely anticipate the general nature of the remarks I am about to make. Whether the graduate dean is responsible directly to the chief administrative officer of his institution or indirectly through a vice president or vice chancellor or vice provost, the fact is that his influence and ability to get things done will depend very largely on the president's confidence in him and the degree to which he is perceived to support the graduate program. If it is clear that the president is a strong supporter of graduate work and research, his dean can exert a considerable degree of influence on institutional policies and attitudes that may not directly be his responsibility but may stll affect the graduate program. If the president is perceived to have no great enthusiasm for the graduate program and to accept it merely as a necessary appendage to what he considers the major mission of the institution, a sincere and energetic graduate dean may lead such a life of frustration that he would be better off not to have accepted his appointment in the first place.

In a great many matters, the dean will deal directly with the faculty or with appropriate department heads rather than going through the office of the academic dean of the school or college in which those departments are administratively located. To work only through the deans of the undergraduate colleges would introduce a degree of insulation from the real world that could reduce his effectiveness substantially. On the other hand, it is clearly important that the other deans be kept informed regarding any transactions between the graduate dean and their departments that have a substantial effect on the programs of those departments. A graduate dean who gets himself seriously at cross purposes with the dean of an undergraduate college could find himself blocked in a great many ways by the dean who controls the budget. Furthermore, the graduate dean will frequently find it helpful to have the active support of one or more additional academic deans in a campaign to introduce new policies or procedures or to reinforce and continue old ones.

Does this mean that the graduate dean can operate only at the sufferance of all other deans and administrators? Not at all. After all, they are really all in the same business and cooperation should come readily. It does mean, however, that he frequently has to depend more on logic, reason, and persuasion than some of his other decanal colleagues. A great deal of what he can accomplish will depend upon his own good common sense and the force of his personality. In a major campaign, he may have to recruit support by logical persuasion rather than being able to conscript it.

Some years ago one of our colleagues remarked that his experience in the business had led him to conclude that the successful graduate dean soon learns to operate, as demanded by the immediate occasion, on one of three levels: that of cunning, low cunning, or downright chicanery. Although this comment was a bit on the hyperbolic side, it may be worth thinking about.

Recruitment and Admission of Graduate Students

Carroll L. Miller

The Panel on Alternate Approaches to Graduate Education considered the issues relating to the recruitment and admission of graduate students and its position has been discussed earlier in this annual meeting. Deans of graduate schools must assume leadership roles in policy formulation and change in their institutions. This responsibility demands attention to the foci and objectives of programs in graduate education and approaches to their implementation. Moreover, recognition of the diversity of graduate programs is needed or rather a sensitivity to the unique features of graduate programs in certain institutions is basic to a realistic approach to admissions and recruitment. Specifically, a graduate school must consider several questions:

What kind of a product do you anticipate as a result of graduate educational experiences?

Given programs that will develop the desirable kind of individual (researcher, teacher) and the atmosphere conducive to learning, what kind of a student should be admitted to the programs—one who should have a reasonable chance of success?

A consideration of recruitment and admissions permits us to focus on a group of students who are not too different from other students —the international student.

Recruitment

Consider the following questions:

1. Do you wish foreign students, if so, why? Do you wish ethnics or minorities? Do you wish to recruit any student?
2. Is this position accepted by the faculty?
3. What departments are open to international students? i.e. What departments wish to accept international students?
4. What kind of student does a given department desire in terms of background, knowledge, abilities, skills, attitudes, motives?
5. What experiences have you had with international students?
6. What financial aid can you offer? What is the atmosphere on your campus? What is the housing situation for international students at the graduate level? For all students?

Having decided on the goals of the departments and the kinds of graduate students desired, questions in reference to recruitment and admissions are posed.

What are some effective approaches to the recruitment of international students? National students? What criteria should be adopted for the admission of foreign students? American students? What procedures should be used to implement effectively the admissions policies?

An institution has decided that it wishes to attract graduate students from diverse backgrounds. Having had little or no experience with students from certain schools, how do we approach recruiting? For international students, recommended contacts are the Institute of International Education, AID offices, American consulates, personal contact and certainly the office of the American Association of Collegiate Registrars and Admissions

Officers. The latter organization is making a significant contribution in its publication of *World Education Series Guides to the Academic Placement of Students in Educational Institutions*. The placement guides should be used with bulletins on foreign education published by the U.S. Office of Education, Comparative Education Division. You whould also use materials from the National Association of Foreign Student Affairs. Have copies of your catalogues and admissions bulletins distributed to populations in which you are interested.

For American students, a similar approach is required. Know colleges and universities, know faculty and staff and use alumni and friends. Visit institutions, interview, use teams of staff and graduate students especially, students from the area being visited and/or preferably in the fields for which you are recruiting. Approach the consideration of students from non-traditional programs with an open mind. Graduates of programs of the University Without Walls; schools which have different grading patterns or no grades, pass-fail, descriptive records; institutions which offer general courses or external degrees should be provided opportunities for admission just as those who finish the regular college programs with usual grading systems.

Admissions

Recruitment and admissions should be aspects of the same process or should repesent continuity in the consideration of a student for a graduate program. Again, rely on admissions officers and your admissions committee for materials. Have periodic and regular briefings of interested faculty and admissions committees by admissions officers. Review the reading of transcripts, the significance of letters of recommendation and the meaning of GRE scores. The graduate dean must know the policies and the procedures but should not be expected to handle the minutiae.

Reference has been made to the use of placement guides for overseas or international students. Such guides provide recommendations for placement as well as the list of documents that U.S. admissions offices should request.

For example, the *Guide for the Hungarian People's Republic*, published in 1972 recommends:

Graduates of the Regular Universities (Tudomanyegyetem) who received the Abszolutorium Certificate, programs vary from 4 to 5 years.	May consider students for graduate admission; the level of placement should be determined by the length of time required for the program and the relation of the work completed to the proposed field of study.
Graduates of Polytechnical Universities (Muszaki Egyetem) who received the Engineering Diploma (Mernoki Oklevel); 5 year program.	May consider student for graduate admission in the field of concentration for the Hungarian Engineering Diploma, the level of placement should be determined by the U.S. institution's policy governing a five year foreign engineering degree.
Graduates of Polytechnical Universities who completed studies in Economics and received the Engineer-Economist Diploma (Menok-Kozgazdasagi Oklevel); Engineering diploma and four semester correspondence course.	May give student the same considerations as graduates of the Hungarian polytechnical universities and may also consider credit in the department of Economics on a course by course basis.

Graduates of Agronomic Universities (Agrartudomanyi Egyetem) and Colleges (Agrartudomanyi Foiskola) who received the diploma; the program varies with the institution from 4½ to 5 years.	May consider student for graduate admission in the same field of specialization; the level of placement and possible deficiencies should be determined by the department concerned.

The documents U.S. admissions officers should request for applicants from Hungary applying to graduate schools are: (1) secondary school certificate; (2) university record book which shows the major department and area of study, the type of attendance (day or evening); the subjects taken for each semester, the hours per week in theory and practice; the results of required examinations; the results of the comprehensive examinations, and the university leaving certificate; and (3) the diploma certificate in the field of Engineering and Science if the applicant applies in these areas.

The U.S. Office of Education moreover, has an updated list of its publications (May 31, 1973) which should prove helpful in providing a background for the evaluation of educational credentials of foreign countries. Write to the U.S. Department of Health, Education, and Welfare, Office of Education, Institute of International Studies, Washington, D.C. 20202 for its *Publication on Comparative Education, Current List*, May 1973. Some of the earlier publications in the World Education series to which reference was made earlier include descriptions of the country, and the educational structure. The services and contributions of the International Education Activities Group of AACRAO to evaluation of foreign credentials are immeasurable. (AACRAO publications may be obtained from the American Association of Collegiate Registrars and Admissions Officers, One Dupont Circle, Suite 330, Washington, D.C. 20036).

Another agency that has played a role in the development of the materials for the evaluation of international students records is the Council on Evaluation of Foreign Student Credentials. The Council is composed of eight member organizations:

American Association of Collegiate Registrars and Admissions Officers
American Association of Junior Colleges
Association of American Colleges
Association of Graduate Schools
College Entrance Examination Board
Council of Graduate Schools in the United States
Institute of International Education, and
National Association for Foreign Student Affairs

In addition, there are five observer organizations whose representatives participate in the deliberations: The American Council on Education; U.S. Department of State, Agency for International Development; U.S. Department of State, Bureau of Cultural Affairs; U.S. Office of Education, Comparative Education Branch, Institute of International Studies; and University of the State of New York, State Education Department.

The applications for admission of graduates of U.S. institutions should be reviewed individually. Knowledge of the college from which the student is a graduate, and information concerning the strength of the program from which he graduated as a major or concentration are essential. Careful attention should be directed to applicants from ethnic/minority groups and colleges where students are primarily from these segments of the population.

The important considerations, then, in recruitment and admissions relate to the individual student, the graduate school and the designated departmental program. The proper meshing of these elements will contribute to more effective graduate education from both the point of view of the consumer, the people, and that of the producer —the university.

Academic Standards and Degree Requirements

Robert F. Kruh

One of the reasons we assemble in a group like this is because of the fact that there is hardly any formal preparation that any of us have gone through in order to be in the positions we now hold. In fact, I guess the usual dictum is that you probably would not want to appoint anyone as a graduate dean who had formal preparation for the job. That is both a criticism and an observation which we have to live with. And so, if we are trying to cover some of the considerations which deans deal with, then we may view this session as on-the-job training which we all go through.

I shall make some informal comments about standards and degree requirements. Evidence of high standards, in a way, is somewhat like pornography; we can't define it but we know it when we see it. This is not a talk about what high standards should be, because they will differ among institutions, relying heavily upon the intuition that each of us brings to our own academic careers. I will try to give a few philosophical comments that set a context for working within this very important area, and I feel that, aside from the many activities that a graduate office might undertake—and these have been mentioned at length—the maintenance of a high level of academic performance and research accomplishment is a fundamental responsibility of the graduate school and the graduate office.

I would maintain at the outset that a graduate faculty is a corporate body that is more than the sum of individual faculty members or the sum of several departments, that it does bear a total and common responsibility for maintaining an intellectual climate and appropriate professional and disciplinary standards. The reason I make a point of that is that at times it is very easy for various faculty members to say, "Well, I don't pretend to tell civil engineers how to do their work," with the clear implication that I, a chemist, should be left alone to do what I wish with my students. To a great extent that should be true, but, although we must depend on the chemist to know what good chemistry is, we do not operate graduate programs in a vacuum. There are many students and many faculty members involved and we have to approach responsibilities in a consistent way that will maintain equity and fairness in the common undertakings of the institution.

There is a hierarchy in which these responsibilities do become divided and more finely specialized. Of course at the first level, which I have just mentioned, is the graduate faculty. The graduate faculty bears the full corporate responsibility for the graduate programs. After all, it is the institution that awards the degree in the name of the graduate faculty. The degree might be in civil engineering, history, or institutional management, but the institution and the graduate faculty set such broad parameters as residence requirements, language requirements, loads that students might take, and so forth. At the departmental or disciplinary level, the faculty formulates a core program that is appropriate. They agree upon the procedures and features of the academic program which will best serve the development of students in that discipline. At the finest structural level comes the supervisory committee, who, within the limits defined by the graduate faculty and the departmental faculty, tailor a program that will best serve the students' needs and objectives consistent with these other boundary conditions. Each one of them, then, has a role to play in developing and implementing the expectations which characterize graduate programs of high quality.

The dean's short-term responsibility involves the interpretation of policies in individual cases so as to bring about consistency and equity in dealing with disparate programs. It is impossible for the dean to police all of the workings of individual programs or faculty members, for the maintenance of quality is not brought about by rules and structures but by the selection of able faculty members and students who are given the means to do good work. It is this latter, long-term responsibility which the dean can and should exercise to create the graduate institution which is emulated in American higher education.

Biomedical Sciences Workshop

Wednesday, December 12, 1973, 2:00 p.m.

Chairman: William H. Macmillan, *University of Vermont*
Lionel M. Bernstein, *U.S. Department of Health, Education, and Welfare*
Ronald W. Estabrook, *University of Texas, Southwestern Medical School at Dallas*

William H. Macmillan

I would like to start out with a few introductory comments to set the scene for this afternoon. It occurred to me that there are among us today some people who may not be familiar with the Council of Graduate Schools, so I would like to take a moment to briefly outline the history of the organization.

In the first half of this century, graduate education, particularly programs leading to the Ph.D., were concentrated in a fairly small number of institutions of large size and of a prestigious nature. In the post-World War II era graduate education became an increasingly important factor on the national scene, and more and more colleges and universities were becoming involved in graduate education. At that time there were several small regional associations which addressed themselves to graduate education and its problems. Perhaps the most influential group was the Association of Graduate Schools within the Association of American Universities. This organization, recognizing the changing pattern of graduate education in the United States, spearheaded the establishment of a unified organization which would represent graduate education to a broad sector of education, to governmental agencies, to foundations, and to the public. Thus, in March 1961 the Council of Graduate Schools was established. The original membership included a hundred institutions and in the last thirteen years representation has grown to 311.

The Council of Graduate Schools represents essentially all institutions which offer graduate degrees except for some which are involved strictly in professional degree programs. The purpose of CGS is stated very succintly in the constitution established in 1961 which reads in part as follows:

> "Its purpose is the improvement and advancement of graduate education. The purview of the Council includes all matters germane to this purpose. The Council shall act to obtain the needs, ascertain best practices and procedures, and render assistance as indicated. It shall provide a forum for the consideration of problems and solutions and in meetings, conferences, and publications shall define needs and seek means of satisfying them in the best interests of graduate education throughout the country. In this function, the Council may act in accordance with the needs of the times and particular situations to disseminate to the public, to institutions, to foundations, government, and other groups whose interests or support is deemed of concern, information relating to the needs of graduate education and the best manner of satisfying them."

There may be some of you among us who wonder what a graduate dean's responsibility is, and if you asked us to define a graduate dean's responsibility, it would vary with each one of us. However, if we go back a few years in history and listen to what Logan Wilson said in 1962 when he was President of the American Council on Education—he said that he looked with awe upon graduate deans because of their influence as impresarios of science and scholarship in the modern university. He commented that, despite the fact that he heard frequent complaints about the lack of direct authority, that we all have, he felt that the administrative roles of graduate deans were enviable. He said, who else in the academic scene can look down to the faculty, past other deans, back to the president, and if so inclined say nothing to the alumni or to the public at large. So, in spite of our difficult positions, there are certain advantages to our responsibilities.

If the primary responsibility which graduate deans and the Council have assumed is the pursuit of academic excellence, and recognizing that there is no substitute, therefore, 'quality control' is the password for CGS.

We are here this afternoon because of an expressed interest on the part of several deans relative to the rapidly changing environment for doctoral studies in the basic medical sciences in a medical school environment, and the express concern for the fact that many of the basic medical science departments are now finding themselves to be stepchildren of the medical school and stepchildren of the university. During the sixties, the basic science departments were well funded. They were well respected, and productive in terms of Ph.D. output and in terms of research activities.

During the shrinking of federal support for basic sciences and deemphasis in this area, there has been very serious impact upon the direction, development, and perhaps upon the quality control of graduate programs in many of these departments. Medical school deans are finding these departments to be an awesome expense, and if the medical schools are to fund basic science departments, many deans feel that it is their responsibility to do so only to the level necessary for the education of medical students. Medical deans are fearful of the cost of graduate education programs which they are being asked to support.

The federal government has appeared to have assumed the position that selection of future faculty for these departments and of research investigators in these areas is not among its areas of high priority. The period of the sixties further made the position of the basic science departments difficult as faculty members themselves felt a greater responsibility to the various funding agencies than to their universities. During this period it was *de rigeur* to express greater interest in the importance of research than in the importance of the educational process.

Times have changed drastically. Eighteen months ago graduate schools were writhing over the demise of the NIH training grant programs. They were experiencing withdrawal syndromes resulting from the loss of NDEA fellowships, NASA and NSF traineeships. And graduate schools are still trying to adjust to their new *milieu intérieur*.

In a discussion of graduate programs within the basic sciences we must realize that we are not simply dealing with graduate students in a program leading to the Ph.D. in an uncomplicated university environment, but we must realize that we are dealing with departments in a medical school, in health educational environments, with all the complications of a hospital involvement, plus the wide responsibilities being forced upon universities today. Today's faculty members, within the basic sciences, are being called upon to participate more outside of their own areas than they have in the past. They are being asked to teach, of all things, at the undergraduate level, and this to many people in basic science departments is quite a change.

Our interests today are not parochial but are of concern in the broad context of the university development. When one looks to the future for insights relative to the status of any aspect of higher education one generally trudges off to Washington to try to find out who knows what. We did so and it became increasingly evident that the office that we should contact was that of Dr. Henry Simmons, Deputy Assistant Secretary of Health. We contacted Dr. Simmons' office, and, as we see in the program, had initially thought that Dr. Simmons would be with us today, but he has been called out of the country and we are to have Dr. Lionel Bernstein of Dr. Simmons' office with us this afternoon.

Dr. Bernstein received his M.D. and his Ph.D. from the University of Illinois. He was Chief of Medical Services at a Veterans' Administration hospital associated with the university where he served also as professor of medicine. He was later director of research for the Veterans' Administration and associate director of the National Institutes of Arthritis and Metabolic Diseases and most recently has joined Dr. Edwards' office in HEW.

I have asked Dr. Bernstein to talk to us today on the general area of federal planning for graduate studies in the basic medical sciences. It is my understanding that Dr. Bernstein has been very heavily involved in this area during the last several months and is probably the best person in Washington that we could have with us today to discuss current thinking of the federal government in assistance for education and research training for graduate students in the basic medical sciences. It is my pleasure to introduce to you, Dr. Lionel Bernstein.

Lionel M. Bernstein

Since I am here to represent Dr. Simmons, I would like to read what he was going to say and then I would like to make a few comments which are related but may have a somewhat different flavor.

Dr. Simmons' remarks are as follows: "The American health care system and the health profession of this country are under greater pressure for change than at any time in our history. Society in general, the elected representatives in particular, and thoughtful people throughout the industry are concerned about the rapidly and massively escalating costs of care, equitable access to that care and the quality, utility, and necessity of much of the care being rendered in this country.

"Because of these problems and concerns a great many new initiatives are either being started or contemplated at the federal level. Among these, national health insurance, area wide health authorities, new delivery systems such as MHOs (health maintenance organizations), new health manpower legislation, health education initiative, new drug and medical device legislation, and quality assurance programs, such as the PSROs (professional standards review organizations). While your immediate concern this afternoon is with educational and research training in the basic medical sciences, it is important for all of us to remember that we must consider all plans and proposals that affect the health system of the country. All in one way or another affect you and your schools. Frankly, we do not have any sense of priorities that places manpower ahead of research in a hierarchy of health issues, but we are obliged to live with the timetable of events that demands action no matter what one's personal sense of priorities might be. We now face the need to make some critical and far-reaching decisions that will influence the nation's health manpower efforts for years to come.

"You here today and others in the scientific community can and must help make those decisions. We need your constructive cooperation which makes meetings such as this with the give-and-take aspects of the questions-and-answers sessions that follow so important to all of us.

"It is no secret that in slightly over six months from now on June 30, 1974, virtually the entire statutory base for present federal support of health manpower education will come to an end. On that date the comprehensive Health Manpower Training Act, the Nurse Training Act, the Public Health Training Act, and the Allied Health Professions Training Act will all terminate, which means that we now have to decide what form of legislation, if any, should replace these laws."

I might add here, parenthetically, that research training, that supported by the NIH in the main, the training with which you are concerned, has been authorized through the Public Health Service Act but may be preempted by the current Kennedy and Rogers bills (H.R.7724) which, if they are enacted, will eliminate some previously existing authorities for research training programs.

"Now, I am not so naive as to suggest that the Congress will allow these and other programs to lapse without viable alternatives. But we simply do not know at this time just what the Congress will do and how much influence we will have in those decisions. What needs to be emphasized is that the federal government has no intention of pulling the pins out of all assistance to biomedical education and research or any other kind of education and research as they relate to the total health picture. However, the federal government undoubtedly will be more selective in the future, with more urgency being placed on the setting of realistic priorities.

"The trend frankly is away from pinpointing the medical student or other health professional for special treatment. Instead, he or she will compete with other students through the Office of Education for the limited funds and grants available. The undergraduate student will compete with all others regardless of the field for funds. The graduate student, on the other hand, may find new doors open if he or she has been working in what we call the shortage areas. Recent announcements from the NIH bear this out. Individual research fellowships and institutional research fellowships for the NIH and for the ADAMHA (Alcohol Drug Abuse, and Mental Health Administration) will be awarded on a competitive basis in specified health and health-related areas. The emphasis is on specific areas of shortage. The need is on the postdoctoral level.

"There is also exploration of some funding available for predoctoral candidates but again on a selective basis and mainly through the research and development program of the National Center for Health Services Research and Development.

"Over the past decade the federal government, under a series of progressively more extensive pieces of health manpower legislation, has become the prime source of financial support for the training of physicians and dentists and we have made substantial contributions to the training of other professional health personnel. In only ten years, federal spending for health manpower programs increased from $65 million a year to $536 million annually, and the cumulative total spent for health manpower over that ten-year period amounts to nearly $3.5 billion. This does not even take into account the even larger sum represented by research grants and reimbursement for services, both of which contribute very substantially to the revenue of teaching institutions.

"We are now in the process of evaluating the return from that considerable investment. In such an evaluation we must decide what our objectives will be for future concerns. Dr. Edwards, the Assistant Secretary for Health, has suggested four main objectives. First, we should seek to maintain present capacities to train health personnel and thereby assure large future increases in the supply of manpower. Second, we should come to grips with maldistribution problems. Here the emphasis obviously is on the patient care aspect of the spectrum. Third, we should seriously attack the problem of minority and female under-representation in the health professions, and that of course means admitting more minority and female students to all the health training institutions. And finally, we should work toward the most efficient handling of health care responsibilities by increasing productivity, making more effective use of allied health professionals, and encouraging team and group practice in the provision of health services.

"The Department is attempting to develop the health manpower legislative proposal that will address these objectives specifically. At this moment a number of options are being weighed that would shift the thrust of federal health manpower spending away from the earlier goal of aggregate increase in total manpower and toward these more complex and clearly more urgent and more narrow objectives.

"We are looking at the future role of capitation to determine whether this means the support should not perhaps be tied to the development of programs that address the efficiency and effectiveness of training rather than the size of enrollments alone. We are looking at general and special institutional support to determine whether the present levels and mechanisms of funding might not be changed to more closely coincide with the above-mentioned objectives. We are also wondering, when the federal budget deficit is climbing and the states are showing an aggregate budget surplus, whether the states should pay a larger share of the cost of health training. We are clearly wondering whether there is a continuing justification for treating medically oriented training and research differently from other advanced education insofar as federal student aid is concerned.

"Perhaps the main reason we have a variety of isolated health initiatives is that we lack a comprehensive national health strategy. We have focused our sights on total numbers without really addressing the question: Are those being trained actually making health services more fully and equitably available to the American people? We have responded to the urgent demands of teaching institutions for increased federal support without carefully considering whether it is wise to make the entire health education complex highly dependent on federal funds, so dependent that the sudden loss of such funds would certainly have disastrous results.

"What I am saying is that we have failed to relate clearly and explicitly our health manpower policies to a broader national commitment to improving the health of the American people. One illustration of the failure to relate health manpower policies to broader health goals is suggested by our half-hearted and unsatisfactory efforts to expand the contribution of the allied health professionals. Some rather persuasive studies indicate that physician productivity can be increased markedly by the proper use of traditional allied health personnel. Clearly our priorities have been out of phase with the problems facing us and with the important opportunities to do something about these problems. I believe it is incumbent upon those of us who help shape and influence federal health policy to seek the most effective and efficient ways of meeting the demand for health services and making certain that those services are of the highest practicable quality. Clearly, our health manpower strategy has to be consistent with that objective and that means that we cannot through some mistaken sense of fiscal responsibility throw the medical and other health professional schools into an even deeper economic crisis. We cannot sharply reduce federal support without a clear idea of where the schools will be able to turn for the funding they obviously need.

"Many people ask about special revenue sharing for training and research in the health field as an alternative to direct federal support. Such a proposal is not yet ready for presentation and will undoubtedly not be put forward until after the plan for national health insurance is in place. However, there is no reason why those in the health field should not be using their considerable influence to gain a full measure of the general revenue-sharing funds that have been allocated to the states.

"None of us who is concerned with health manpower issues, neither we in government nor you in the education field, can expect to meet our responsibilities as we have in the past. Those responsibilities are changing. New problems are taking the place of old. New policy issues are emerging that we had little conception of when the federal government first became a major partner in the health manpower field. Ironically, our success in dealing with the health manpower problem as it was perceived ten years ago has brought into being a new set of problems that now demand attention. The difference, however, is that these newer problems will not yield at all if we simply try the measures of the past against the problems of the present and the future. I hope that we can collectively engage in a more sober but certainly a more appropriate dialogue about the future of health manpower and the role of the federal government in relating its manpower policy to the broader responsibilities that we bear in the field of health. The need for such dialogue is clearly at hand."

That dialogue makes Dr. Simmons' or my visit here potentially important. I have kept Dr. Simmons' formal remarks to a minimum today; I would now like to add a few comments of my own, and then have an opportunity for questions and answers.

As a newcomer on the scene in the office of the Assistant Secretary for Health—I have been there about six months—I come with no real bias in any direction. I would like to give you my view of what I have been exposed to during these six months.

First of all, I sense that in the Office of the Assistant Secretary for Health, an attempt is being made to bring the federal role in health to a single major focal point, which focus simply has not been clear in the past. The belief is that, given a good, strong, and appropriate health focal point effectively managed, each of the component activities will gain. At the moment isolated, splintered activities simply cannot obtain support that may be appropriate. When there are competing factions and different parts of the health scene pulling literally in opposite directions, then it is obvious that some components are not going to receive what they should, while at times some receive more than they should. I think this attempt to establish a health focus constitutes a major concern of the Assistant Secretary for Health.

The second thing I would note is that Dr. Edwards has asked some very hard questions in the open forum. Some of his recent remarks to one part of the academic community were received unhappily, because the questions he was asking were interpreted as answers contrary to those of the audience. I do not believe this is necessarily so. I construe as a healthy sign the asking and pursuit of difficult questions.

During the last three or four years, there have been many hours spent and many people at all levels of the academic community, the NIH, and other parts of the health agencies who have tried to address explicitly the question of the justification for research training programs, if we may use this very pertinent example. Whereas all of us have a sense that the need for research training is self-evident and that there is no need to argue, unfortunately there are those who do not see it as so self-evident or if they do, not at the same quantitative level. It is not so much the argument about the principle of the need for research training as it is the question of how much. How much research training do we need? How much research do we need? These questions are even more vague despite the fact that it is no coincidence that research people tend to think the research budget ought to go up, and others think the research budget ought to go down. There is lacking some logical, explicit understanding of everything that is involved to answer these questions. We have not managed to put quantitative answers to these questions in terms that are understandable by people of different persuasions, of different backgrounds. I do not know that these questions are susceptible to easy solutions. But I do think it is important to pursue the answers. It is also important to recognize the support of research and research training by the Assistant Secretary for Health.

To return specifically to research training, the new research fellowship program announced by the NIH and ADAMHA will be directed in the main toward support of individual fellowships rather than to support of institutional training grants, the latter institutional research fellowship awards being reserved for very distinct shortage areas. The definition of a shortage area will evolve as the NIH and ADAMHA attempt to make more specific determinations than they have in the past as to what the needs for research training really are. I think that the federal contribution, in concert with that of the academic community, to data collection and analysis in the attempt to understand and define the real needs in research and research training is a very important role and one which the Office of the Assistant Secretary for Health strongly endorses. The fellowship program will be limited to postdoctoral candidates. One may quarrel about the lack of predoctoral support for students in biological sciences. But the absence of this type of support in all other disciplines has created a precedent against which we must explain intellectually and rationally why we need predoctoral support in the biological sciences. The argument is that there are other routes of support that will do adequately. That is an untested argument which, I suspect, will not be refuted until it is tested.

A third point I might note is that Dr. Edwards is trying to bridge in a realistic fashion many concerns with which we in our community do not generally become involved, but which are indeed very real worlds. He is paying attention to responsibilities that have not been addressed by any of the existing federal health agencies. I might give an example. In the course of these last several months, Dr. Edwards has endorsed the establishment of a new type of research program, specifically, medical practice research. It appears, as we look at the spectrum of research activities that the federal government supports, that the NIH, its institutes, and associated units tend to support research on a certain part of the spectrum while the National Center for Health Services Research and Development supports research of another kind at the other end of the spectrum, and in the middle is an area of research—or potential research—that deals with the fact that more than half of the things that physicians and other health care providers do to patients have never been demonstrated to be either effective or ineffective. This approach says that the federal government is now spending $23 billion a year through Medicaid and Medicare. With national health insurance a year or maybe longer away, that $23 billion is going to increase to a large fraction of the total of $90 billion presently spent on health care delivery. If one thinks that a large fraction of these funds is for things that have not been shown to be effective or not effective, it appears worthwhile to spend some effort deliberately addressing this issue. The new program will provide support for research on interesting and important science problems that stem from the relevancy of what the health care providers are doing for patients. Another area to be pursued is diffusion research. Many new items and procedures are being developed all the time in the intramural NIH, extramural NIH, academia, industry, etc. The question is: Why is there a gap between the time of the development and when it is in general use? It would appear appropriate to establish a high-quality, legitimate science effort to study the process of technology diffusion as it relates to new medical technologies, whether they be drugs or procedures or principles. This is another opportunity for important research to be performed in a framework that is responsive to those elsewhere who say that those of us in the health agencies are not paying enough attention to problems and responsibilities that are truly ours.

I guess I would summarize by saying that the Office of the Assistant Secretary for Health, in my personal judgment, is an active, inquiring, forward-moving organization. They are looking for ways to improve things, to get things done, to explore and queston the nature of ongoing programs. I think that if the answers to the questions are positive there will be support to maintain the programs and if the answers to the questions indicate that the programs really have not been well designed, that they have not been effectively or efficiently run, then changes are likely to be proposed.

William H. Macmillan

It is appropriate at this time to introduce our next speaker of the afternoon, Dr. Ronald W. Estabrook. Dr. Estabrook is Dean of the Graduate School of Biomedical Sciences at the University of Texas Health Science Center in Dallas. He received his graduate training in biochemistry at the University of Rochester and since 1957 has served on the faculty of the University of Texas Southwestern Medical School in Dallas, and as Chairman of the Department of Biochemistry. He has recently assumed the responsibility as Dean of the Graduate School of Basic Biomedical Sciences and now in his capacity as Dean he will have to look upon the problems of the basic sciences in a different light from that of a department chairman.

Dr. Estabrook is Chairman of the Administrative Board of the Council of Academic Societies of AAMC, and I have asked him to discuss with us today his views of possible relationships between CGS and the Council of Academic Societies.

Ronald W. Estabrook

It is a great pleasure to have this opportunity to speak to you about the activities of the Association of American Medical Colleges, since I am a newly appointed dean of a graduate school that resides in a medical center, and I am also a member of the Council of Academic Societies (CAS) of the Association of American Medical Colleges (AAMC) where I serve as Chairman of the Administrative Board as well as a member of the Executive Committee of the AAMC.

I am sure that you are aware that the AAMC has been working diligently and, I think, effectively to enunciate some of the major problems that are currently confronting each of us—problems that seem at times to be baffling and insurmountable. I would like to first provide you with some background information as to what the AAMC is and what part the CAS plays in the function of the AAMC. In this presentation I will try to describe some of the problems that the staff of the AAMC has identified, the approaches that we are taking, and some of the difficult questions that we are seeking answers to. It is very simple to propose platitudes as answers to questions that seem to espouse our course of action, but when you are standing at the cutting edge and have to answer probing and penetrating questions by the people that make the decisions, it is not quite so simple.

What is the AAMC?

The AAMC is an association consisting of three different classes of membership. It consists of a Council of Deans, each representing the 115 medical schools in the United States. Indeed, the AAMC for many years was considered to be a Deans' club, that is, there was really no input from other parts of the biomedical academic community. This has changed in the last six years. The AAMC now consists of a Council of Teaching Hospitals representing over 400 hospitals that serve as the site of clinical training of medical students. More importantly, the AAMC consists of a Council of Academic Societies with representation from 52 scientific societies and specialty academies. In particular, the Council of Academic Societies serves as the spokesman for the interests and concerns of the faculties of the medical schools.

What are the goals of the AAMC?

The goals of the AAMC are to examine and recommend policy and to serve in a capacity whereby they can aid the medical schools in obtaining the highest quality of education, research, and service. These three objectives—education, research, and service—make up the milieu of the medical school and the health science center, and by definition the environment for graduate education of the biomedical scientist.

Each of you undoubtedly has dual representation in the AAMC; through the Dean of your medical school and the Council of Deans, and by your affiliation with an academic society, such as the American Society of Biological Chemists or the American Physiological Society.

I am sure you are most interested in knowing—and I feel that your invitation to me in part reflects a desire to find out—what the AAMC is doing to provide meaningful solutions to the problems that face each of us in the immediate future as the result of the ever changing pattern of decision making which presently exists on the Washington scene. You have gained some appreciation for some aspects of this problem by listening to Dr. Lionel Bernstein. You must be aware, as should members of the Administration—I mean the federal Administration—that no change is above debate and discussion, and indeed the federal Administration has been most receptive to entering into dialogues. They do not always listen and follow our advice, but they are willing to talk and discuss problems of common concern.

The AAMC, and in particular the CAS, has as one of its primary goals to enter into dialogues with both the legislative and administrative branches of our government and to provide advice when asked on issues of concern to our constituents. Hopefully we will continue to provide sound advice that reflects our own enlightened self-interest for the betterment of the biomedical community and the health care of the general population.

In many instances the AAMC must serve as the advocate for the biomedical community as evidenced by the recent judiciary decision against impoundment of research and training funds. The establishment of what is now being called a "judicial oligarchy" in Washington reflects the need to use this third branch of government at the present time.

What are some of the current problems that the AAMC is examining and how do they influence you?

The financing of medical education. As Dr. Bernstein has described, on June 30, 1974, the present Health Professions Education Act will expire. This is the legislation that provides capitation funding for the education of medical students. These funds help to defray in part the government's responsibility for its investment in the education of physicians, a responsibility toward a recognized national need since medical schools do serve as a national resource. Therefore, there should be no disagreement as to the Federal government's role in medical education. There should only be a question of how much support should be contributed by the government. Unfortunately, a more parochial attitude is taken by some who question the role of the Federal government in the support of medical education.

The question of capitation funding should be of direct concern to each of you. Capitation funding is the financial base which pays many of your faculties' salaries. The redundancy of faculty for medical and graduate education in the health science center dictates a need for deep concern regarding future policy decisions on the funding of medical education. Therefore, any change in the support of medical education by the Federal government will have a pronounced effect on the support of graduate education at your own institutions.

There are a number of questions which we—that is, you and I—must be prepared to answer with regard to the support of graduate education in the health science center.

First, what does it cost to educate a graduate student? The AAMC has recently completed a detailed survey to establish what it costs to educate a medical student. Can you tell me what it costs to educate a graduate student? I doubt that there is a man in the room who can do it for his own institution.

How much faculty effort currently supported under the guise of a contribution to medical education really goes to support graduate education? Have you obtained data on effort analysis from your faculty to answer this type of question?

Is graduate education a necessary, integral part of medical education, and, as such, should capitation be extended to support graduate student education as well as medical student education? I believe that when capitation funding was first considered, the need for physicians and other health professionals was most important and was the principal driving force in establishing this legislation. However, as deans and basic scientists, we sat still because we had training grants for the support of graduate education and we did not want to get involved in capitation funding. As a result, no efforts were made to speak out for extending legislation to include capitation for graduate education. I must conclude, therefore, that the exclusion of graduate education as a part of the original HPEA legislation was our own fault; we just did not do anything.

Is the educational cost of training a biomedical research scientist an obligation of the Federal government? I think yes. I am convinced that the AAMC thinks yes. The question is, how much? We must be prepared to provide the required data to answer many of the questions I have stated above if we hope to participate in any manner in strengthening the financial base for graduate education. The future course of legislation, which is now under detailed discussion, will depend upon your full participation in obtaining the necessary data to answer these and other questions.

National Health Insurance

The next topic of primary concern to the AAMC relates to the consequences that may arise during the activation of national health insurance. Mind you, I said "activation." It is not a question of whether there will be such legislation, but rather *how* it will occur. Again you may say that this is unrelated to your own particular interests. This is far from the case. Most medical schools are composed of about two-thirds clinical faculty and one-third basic science faculty. Any decision that alters the earnings of the clinical faculty and their means of contributing to the overall financial operation of the health science center will directly affect the support gained by the basic science departments. Most of us have already participated in local discussions on the impact of the proposed changes in the Social Security regulations for services paid by third-party carriers to our clinical colleagues who are carrying out patient care in teaching hospitals. I hope you have participated in these discussions at your own institutions. The consequences of a restriction of funding from this source will have a pronounced negative effect on the activities of basic science departments, and as such will impede the development of graduate programs in each of our schools. Again, this is an area you must not overlook. It can make or break your efforts to maintain viable programs of graduate education.

Manpower Needs

Another major concern is manpower needs. This is a topic we have all discussed and heard about. Of growing concern to the AAMC is the question of graduate medical education, that is, the further training of medical specialists and their geographic distribution. Again, this is an area of interest not unrelated to your own concerns. You may ask why and how. The question of how many neurosurgeons currently practice and where they practice and whether there might be too many for the needs of the community is essentially the same question we face regarding the training of basic scientists such as biochemists and physiologists. Are there too many for the opportunities that exist? These problems result from the present unstructured and undisciplined programs of graduate education and training which we all enjoy. We have lived in an undisciplined environment. The medical specialists, however, are doing something about it. They are considering a need for quotas, a possible reevaluation of their means of attaining board certification, and the establishment of a monitoring program to evaluate the distribution of individuals trained versus the needs of the community. They are doing this in part through the Council of Academic Societies as well as their own organizations. It is on this solid data base that future decisions are going to be made.

What are we doing as deans of graduate schools? Only now are we considering collecting the most rudimentary of data. The thought of placing any restrictions on how many graduate students enter a discipline is considered by many as heresy. However, the day is coming and we had better be prepared to answer some very difficult and telling questions on how many students we train, regardless of the financial source for the cost of a student's education.

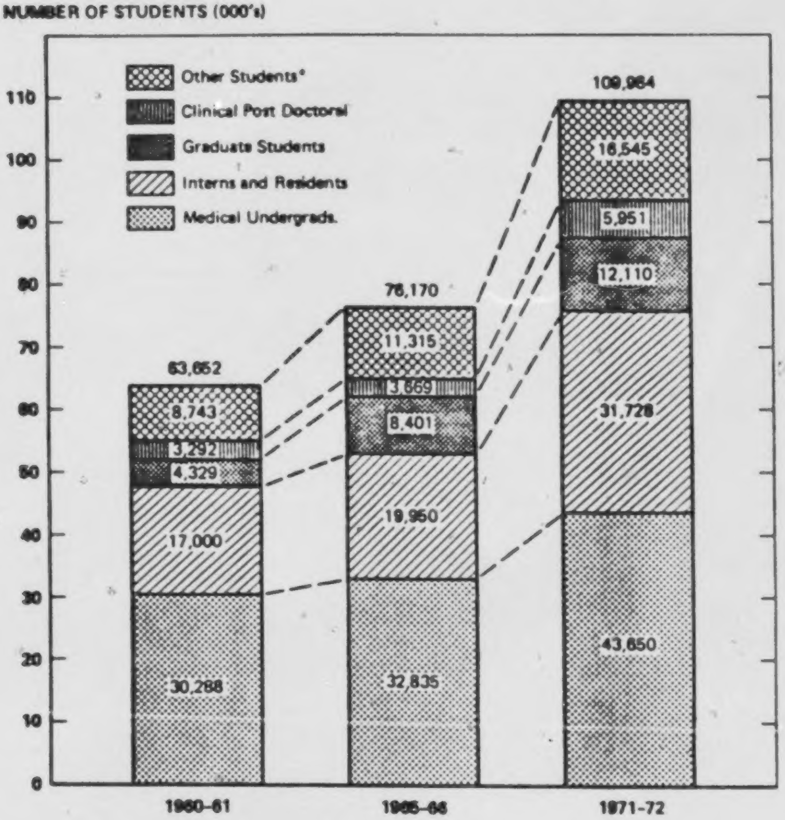
In a recent survey by the AAMC, the data report on aggregate pool of over 12,000 graduate students in training for advanced degrees at health science centers (Figure 1). Dr. Baldridge of your own organization has obtained similar but somewhat lower numbers, suggesting only 10,000 graduate students. Regardless of whether the number is 10,000 or 12,000, it is sobering to realize that this number of students is in training today while the total number of basic science facclty in all our medical schools totals only 8,500 full-time positions. Of this number, only 5,600 are Ph.D.'s, that is, we have 10,000 to 12,000 students in the pipeline and there are only approximately 5,600 positions. Thus, the present enrollment of graduate students, if they successfully complete their education and elect to remain associated with a medical school, could replace the entire basic science faculty in the immediate future. Faced with these numbers, can anyone defend against the charge that we should seek other sources of employment for these individuals and establish monitoring programs for our own disciplines?

Likewise, I propose that each of our graduate schools should become deeply involved in postgraduate education of biomedical scientists as well as participating in continuing education activities for post-M.D.'s. Unfortunately, I cannot go into the details now to describe our own efforts at the University of Texas, but I will try to answer any questions indicating how we propose to involve the graduate school in these activities.

Recently I conducted a survey at my school and was very surprised to find that for the 104 full-time graduate students and about 350 full-time faculty members, there are about 200 professional people, that is, post-M.D. or post-Ph.D., who are in non-tenure-accruing positions. These are called postdoctoral research fellows, research associates, teaching fellows, etc. etc. This represents a large holding area of trained personnel, and if you look at the size of this pool of scientists over the last three or four years, it is expanding. I think that we as deans of graduate schools have to take some responsibility for this group of individuals, as well as enter into the teaching activities associated with continuing education. We should anticipate a large growth of continuing education activity as a result of the possible need for recertification for every physician.

GROWING TEACHING RESPONSIBILITIES OF ACADEMIC MEDICAL CENTERS

1960-61, 1965-66, 1971-72



*Medical student full-time equivalents of dental, pharmacy, nursing and allied health students.

Source: American Medical Association

FIGURE 1

These are but a few of the topics which currently concern the AAMC. The Council of Academic Societies has a direct input into decision making on policy matters for these and many, many other topics. In addition, the Council of Academic Societies has directed its own efforts to examine a number of related questions.

What is the Council of Academic Societies?

It consists of 52 societies representing approximately 30,000 members. These societies range from 12 basic science societies, such as the Association of Chairmen of Anatomy Departments, to large basic science groups, such as the American Physiological Society and the American Society of Biological Chemists. The biggest share of the membership of the Council of Academic Societies, however, is represented by the clinical sciences, where membership ranges from small organizations such as the Association of Professors of Medicine to the very large American College of Surgeons. We have an administrative board consisting of six members, plus elected officers with equal representation from the basic and clinical sciences. Some of you may ask, is the AAMC interested in the basic sciences and basic science departments. The answer is a resounding yes. Even with the disproportionate membership of the CAS by representative societies, the AAMC has established the precedent of equal representation on the administrative board for basic as well as clinical sciences.

Presently the Council of Academic Societies is the group representing the faculties of medical schools. In this way, the CAS is much closer to the cutting edge of concern regarding the impact of changes in Federal funding of biomedical research. A question of direct concern to each of us is the support of biomedical training and research. Working with Representative Rogers and Senator Kennedy and their staffs, dialogues have been developed concerning the mechanism of reestablishing viable training programs for biomedical scientists. From our standpoint the results to date are encouraging but not completely satisfactory. Many details remain to be worked out in the furthering of legislation to insure the continued support for the training of biomedical scientists. The persisting question of *quid pro quo* is ever present. At nearly every discussion of training we are asked: what are these trainees going to do to repay the money that they were forwarded for their education? Our failure to provide reliable manpower data and our inability to effectively define needs in educational programs is a consequence of the presumed indifference of the scientific community and the failure to establish and enunciate our goals. A question was asked of Dr. Bernstein concerning this point. I hope the day never comes when the office of the Secretary of Health, Education, and Welfare tells us how many students we can train. It is up to us to tell them. Also, we must be aware that there is not unanimity in the academic community, and particularly the basic sciences, concerning the mechanism of administering training grants. The problem of equitable distribution of training grant funds is serious and has been divisive to our best interests.

Recently the Council of Academic Societies organized a three-day retreat at the Battelle Institute at the University of Washington. The topic of research training was discussed in detail with representatives from the academic community, the government and private foundations. Specific recommendations resulting from that meeting will soon be reported to the scientific community. In brief, the main recommendation centers on the need to increase our efforts to account for what we are doing, and to obtain better data on career opportunities relative to the number of students in training. The other major point decided at the meeting is that it is necessary that private foundations assume a greater role by sharing the responsibility for the training of students. We have already received some favorable and encouraging responses to this suggestion. As the result of this meeting, the AAMC has indicated its willingness to undertake the task of establishing a roster of graduate students, post-doctorate fellows, as well as other professional personnel in non-tenure-accruing positions associated with medical centers similar to the roster now maintained for faculties of medical schools. To obtain this data, the AAMC will need your help and your cooperation. Without this data we will continue to flounder in a swamp, never knowing how sound the ground is to support our next step.

Of course we all recognize that the number of biomedical scientists trained will be dictated by the amount of funds available for research. Therefore, the CAS is directing its attention to the question of research support for the future and the mechanism of establishing priorities as to timely and important topics which should be emphasized as national research goals.

A further topic of concern to the CAS, and in particular its Research and Training Committee, relates to proposed oversight hearings of the National Institutes of Health. During the coming year, it is expected that Senator Ribicoff or Senator Kennedy will initiate hearings to evaluate and discuss the goals of the National Institutes of Health and means of attaining these goals. Some of the key questions which may be asked concern the authority of the Director of the National Institutes of Health and the question of the continuity of leadership at NIH. The question of the possible role of political decisions, rather than scientific decisions, dictating the function of NIH is of primary concern. The maintenance of the external peer review system should be a point for discussion. The appropriate distribution of resources between investigator-initiated research and contract research and the implementation of long-range goals rather than short-term policies aimed at very limited objectives are of concern to each of us and the students we train. At the present time, a committee of the CAS has met with former HEW Secretary Wilbur Cohen, who is serving as a special counsel for Senator Ribicoff's committee, to assist in evaluating the best means of obtaining the opinions of the scientific community regarding many of these points as well as others.

A major concern of the Council of Academic Societies is faculty tenure and unionization of faculties. As you are aware, the number of tenured faculty in our medical schools is increasing at a rapid rate. I have been told that approximately 46 percent of the faculty in medical school was tenured two years ago, while 62 percent are tenured now.

The advent of the present period of greater accountability places an increasing burden on the administration of universities to justify further growth. In essence, we are rapidly approaching the era of a no-growth industry. The consequences of this restriction places in jeopardy the continued influx of new and youthful talent. This of course is not unrelated to the question of manpower training. Further, we will have to reflect more intensely on the utilization of the present manpower we have. How this will affect the basic sciences, again, will dictate the maintenance and development of graduate education programs at each of our institutions, This coming March, the CAS under the auspices of the AAMC will hold a debate on the role of tenure and faculty unionization in the health science center. I hope that many of you will have the opportunity to attend this debate. We have obtained distinguished speakers to take both sides of these questions and it should be a lively meeting.

In addition to each of the topics I have attempted to itemize above, many others occupy the attention of the Council of Academic Societies and the AAMC. The number of problems confronting the AAMC and the CAS, where advice and constructive criticism is sought by the administration and the legislative branches of the Federal government, is truly staggering. The resolution of many of these problems directly affecting each of us and our faculty and students requires that we work together, maintaining open lines of communication with those in decision-making positions in Washington.

We seek your involvement and your cooperation with the efforts of the AAMC and in particular the CAS. This does not mean that we always have to see things in the same way, but at least this will avoid a redundancy of efforts and it will provide the forum for a single voice when an important message is to be advocated for biomedical research and training. We must remember that the administrators in Washington are individuals seeking sound advice to help in formulating solutons to their very complex problems. We must recognize our responsibilities and we must be innovative and reasonable. Many of us are deeply committed to the need for increased support and recognition of the basic biomedical sciences. We all know that advances in health care will come from knowledge gained at the bench. To do the research of the future we must have the very best talent. These are the young scientists with keen minds and the energy to tackle major problems.

The other day I was fortunate to read the very thoughtful document developed by your organization entitled "Scholarship for Society: A Report on Emerging Roles and Responsibilities of Graduate Education in America." This was a document developed by your Panel on Alternate Approaches to Graduate Education. We must consider seriously the many alternatives that are available to us and we should explore and exploit these. In our own case we are perhaps unique by our necessary umbilicus to the medical school. Personally I believe we stand on the threshold of a new beginning where a great potential lies before us if we have the imagination to take advantage of it. This in turn will better establish our identity and strengthen the role of graduate education in the health science center.

It is apparent that I have not had time to touch on all the problems which confront the basic sciences in the medical school. I have not even mentioned the development of parallel basic biomedical science education programs on many undergraduate campuses. Again, the CAS and the AAMC are deeply concerned about this trend in some schools. The AAMC has established as policy the statement that a medical school cannot function without a basic science component as an integral part of the medical school. To insure that basic sciences are strong, the AAMC through its representation in the accreditation procedure for medical schools, attempts to include a basic scientist as a member of the accreditation team. In this way the AAMC stands at the critical crossroads for maintaining the basic sciences as a viable entity in the whole health science center.

Many of us, as deans of graduate schools at health science centers, have maintained a pretense of virtue and we have shared the umbrella of support with our colleagues in the medical school. The medical schools, however, are now facing major problems of their own. Frequently we do not appreciate the strength of this symbiotic relationship with the medical school. It is time we started building our own shelter, working in concert with the medical schools to achieve a common goal of primary concern to us all. We need to build this structure on a firm basis of data so that we can plan ahead and set reasonable objectives. Working together, these goals can be reached and we hope that you will join us, that is, your organization will join with the Council of Academic Societies of the AAMC in attaining the very best for graduate students in the health science center.

Third Plenary Session
Evaluation of Graduate Programs

Thursday, December 13, 1973, 9:00 a.m.

Chairman: Jacob E. Cobb, *Indiana State University*
Robben W. Fleming, *University of Michigan*
Robert Kirkwood, *Federation of Regional Accrediting Commissions of Higher Education*
Sterling M. McMurrin, *University of Utah*

Jacob E. Cobb

If the suggestions that came to the program planning committee are an indication of the interests which graduate deans have over the country, one of the most prevalent interests has to do with the internal evaluation of graduate programs.

I believe that reference to your program will indicate that no more blue ribbon panel could have been assembled to discuss this problem than the individuals we have here this morning.

I will introduce them very briefly; however, they really need no introduction. Dr. Robben W. Fleming, President of the University of Michigan, is certainly one of the most eminent university administrators in the field. Dr. Robert Kirkwood, Executive Director of the Federation of Regional Accrediting Commissions of Higher Education, was formerly associated with the Middle States Accrediting Association and is one of the most sensitive people in all of accreditation to the problems of graduate education. Dr. Sterling M. McMurrin, of the University of Utah, is the former United States Commissioner of Education and is graduate dean of an institution which, over the past several years, has done a very great deal of internal evaluation.

It is my very great honor to present these individuals to you.

Robben W. Fleming

I should say at the outset that I wish I had a great deal more confidence than I do in the wisdom of what I am about to say.* In the first place education is an enormous spectrum. We too easily forget that higher education in America is not monolithic in any sense of the word.

Secondly, I am more and more convinced that we are at a watershed point in our history. We saw the turbulence of a few years ago. We did not know whether that was a momentary phenomenon or a long-term one. Now, the economic events of these last six months increasingly suggest that we are at a turning point in our history not only with respect to social habits and events but with respect to the economy in this country. This could have a profound effect upon where we go.

---

* President Fleming's remarks were delivered without a manuscript.

In talking about graduate education, what I have to say falls under two headings. The first deals with my assumptions on which I then draw the second part of my remarks which relate to the future of graduate education. One cannot speak knowledgeably about the future unless one is prepared to state what his assumptions are with respect to the climate in which we are going to be operating.

Therefore, I start with my assumptions. First, there will be no significant increase or help in terms of assistance from the federal government during the next three to four years. I do not see any evidence in Washington that we are going to make any significant progress in the period immediately ahead. We all know where the trend line is with respect to federal aid of various kinds. Even if the philosophy were to turn around immediately, it would take some time for it to appear through the pipeline in a way which would be of assistance to us. Therefore, my assumption is that any plans we may make for the next three to four years are essentially based upon what the present policy is and I do not see that policy as being one of great sympathy with what we believe to be the aims and objectives of graduate education.

Secondly, I hold the orthodox view that the Ph.D. market is tightening up and will continue to tighten up. The large numbers of holders of Ph.D.'s who expected to enter the academic world will find that market shrinking very substantially for reasons which all of us are familiar with — those reasons being both demographic and in terms of the expansion of aid to graduate education in general. I believe that in that kind of a market, the high prestige schools will tend to be in a somewhat more favorable position with respect to the placement of their Ph.D.'s than will other schools, but there may be an offsetting advantage for other schools in the sense that they may more easily and readily adapt to new conditions than will those schools which are able to proceed much as they have in the past. Stated differently, what will cause schools to change and to adjust to new conditions will be pressures on them for the employment and placement of their students. The easier it is to proceed in a traditional fashion, the more difficult it will be to bring about those changes; and, if it is a correct assumption that those schools which tend to have a high prestige Ph.D. will find it easier to place their people in a traditional market, then it may follow that those schools not in that category will find it easy to change and may, in fact, be more successful in adapting to new conditions.

I believe that the manpower projections which we all talk about as an essential part of forecasting graduate education will not be very successful. I do not mean that they should not be undertaken nor that we should ignore, for purposes of those students who wish to engage in graduate work, such aid and counsel as we can reasonably give them with respect to the future in various fields. I would simply point out to you that we have in the last six months, for instance, undergone a very major change with respect to our perception of the energy crisis. For those who are specialists in that field, they may feel they had cried in the wilderness for a long time without much receptivity for what they were saying. The fact that the rest of us seemed to be shocked about this all of a sudden is due to our ignorance rather than any failure to perceive its coming. The fact is that we are clearly now about to have a crash program financed by the federal government to meet with the energy crisis. That crash will have some carryover into our universities. As we know, a good deal of emphasis is going to be put upon research into alternative sources of fuel, power, and so forth. My point is, all of a sudden, we have a totally new dimension in terms of the financing of graduate work in a particular area which six months ago was not there. That will affect the entrepreneural capacity of our colleagues to think of new ways in which their skills and programs can be adopted to meet the new programs which offer training money.

The past record of manpower projections does not give one great confidence that we do it very successfully. Thus, we are uneasy in counseling graduate students as to whether there really is a market for the skills they are obtaining when they are through. However, if they have the best information we can give them and they still choose to go into the area, our own disposition is to say that the decision is one which the individual has to make.

A further assumption I make is that graduate enrollments will hold relatively well; however, two things about them will be different. One, which I find very troubling, is that it will be easier all the time for the most affluent students to go and more difficult all the time for the less affluent student to do graduate work. Since we very easily underestimate the degree of affluence which we have reached, enrollments could hold up while at the same time being confined too narrowly to the more financially able students.

The second thing that will change is the kind of graduate students we will have. I suspect that the Ph.D. market in its traditional form will drop down. What will occur will be a greater proliferation of master's degrees and perhaps a creation of some new degrees. I believe there will be a significant amount of enrollments in graduate courses not directed toward a particular degree. In terms of numbers, I think enrollments will hold relatively stable; however, the mix will change.

Next, I believe that the pressure for the coordination of graduate work will continue and probably increase. That is for very obvious reasons. Where public funds are being used in support of graduate education, there is increasing pressure for the avoidance of duplication and for efforts to better coordinate studies. This is principally for cost reasons but not entirely so. It is also for reasons of quality and to avoid the proliferation of programs which are not of the calibre which one would like to see in graduate work. The coordinating pressure will extend to the private institution as well as the public because increasingly around the country private institutions are being forced to turn in the direction of public funding.

What one is seeing in states all over the country now are formulae for giving aid to the students of private institutions and the price of that, I believe, will be some kinds of coordination within the total system. There may, for instance, be an increased pressure toward regional integration of facilities so that one can shift the student around within a given region for the kind of work he wishes to pursue.

Finally, I make the assumption that the pressure for change in graduate programs is not due to the fact that we have performed badly in the past. Too often we tend to say that we one day have the greatest educational system in the world and the next day we suddenly have the worst educational system, when it is the same system both days. Now, either it was not as good as we said one day or it is not as bad as we say it is the next day. We cannot have it both ways. My belief is that graduate work in this country is of very high quality and, therefore, the fact that it must undergo change is not because it has been badly done, but because the milieu in which it is being carried out has significantly changed.

Based on the foregoing assumptions, these are the things I would say about the future of graduate education. First, because there will be significant change, we should not assume that the traditional programs will disappear. This is not going to happen. There will, in fact, be a substantial core of work which is not greatly different from that which has been done in the past. We do need high quality graduate education in many of the same areas as in the past, and they will continue for a lot of reasons. First, because there is a need for them. Second, because the faculty will not lightly give it up. And finally, there is market support for the core of that traditional curriculum. While it may be that the products of that system will necessarily have to have reduced expectations with respect to their alternative opportunities, once they have received the degree, opportunities will be there.

Additionally, there will be, I believe, totally new needs but conducted largely within the old framework. This will require residence work on the campus, but there will be both new kinds of degrees and in some cases less emphasis upon any degree. For instance, I believe that you will see master's degrees increase in popularity in various areas. We now see increased demand for the master's of business administration, and an increased need in areas of public health, the environment, public administration, and cross-disciplinary degrees avoiding the specialties that have grown so in the last quarter of a century.

Since studies show that there is going to be significant growth in the community colleges across the nation, graduate training for faculty members in that segment will be different. Incidentally, Michigan sibling data shows that children in families who are eligible for college in this decade are closer together than they have been in the past or they will be after 1985. The significance of this is that there will be multiple children in a given family eligible for college at the same time at a higher rate than has been true in the past. That in turn will pose a greater financial obligation upon the individual family which will surely exert pressure to send those youngsters for the first part of their undergraduate education to community colleges where it will be most economical. That fact will exert pressure on the upper division classes in the four-year schools, and may further affect the capacity and ability of students to go for residential graduate work.

There will also be more interest in non-degree work — graduate but non-degree work. A variety of reasons suggest that conclusion. One is obsolescence, that is an individual takes just those courses which are perceived as protecting him from obsolescence. That demand may affect the way in which we offer courses. It may, for instance, generate weekend TV and packaged cassette programs.

Secondly, I believe that there is a quality of life factor here which is going to increase the demand for graduate education. When any country has as high a percentage as we do of students who have had an undergraduate education, they are not going to sit in front of the TV tube for the rest of their lives without being bored. I suspect, therefore, that we are going to find an increased desire on the part of those with a baccalaureate degree to take certain kinds of graduate courses with no degree intent in mind, particularly, but simply because it satisfies an intellectual curiosity about a field in which they are interested, and I call that the quality of life. I do believe there are significant numbers of people who will go toward that kind of work simply because they are interested intellectually in exploring these kinds of things.

Thirdly, I think there will be those who want to acquire work in a limited competence area, which they see as related to their particular interest or profession. Much of that interest will be exhibited by part-time students rather than full-time students. This also relates back to the financing of graduate education.

I want to also say a word about the nontraditional type of education in graduate areas. Some of it will be directed toward a degree and significant portions of it will not. I tend to believe that the degree as such is going to have less importance in the future than it has had in the past. Non-traditional graduate work may very well be tied in to regional facilities, either at other universities or in other facilities available through industry or the community. I believe much of this kind of education will be oriented toward technology and in that connection, I call to your attention one very significant point which the Carnegie Commission makes in one of its reports. We have concluded in the past that technology is fine but instead of saving costs as so many of its proponents have expected, it tends to improve quality but increase costs. But over a period of time, particularly in an inflationary economy, costs for personnel will continue to go up while technology costs will tend to go down by comparison because the more it gets into mass production the more you can stabilize costs. That will mean that in the many cases where we have said that technology is too expensive, this will change as personnel costs rise. We are seeing this development more and more across campuses throughout the nation. It would not surprise me if segments of our faculties become producers of educational materials which will then be used by students located in entirely other places.

I will conclude with these two comments. One is the increasing disposition of the funding authorities to try to measure what it is we do. In doing so, they tend to adopt the traditional forms of measurement, such as head count, full-time equivalent, degree output, credit-hour output, etc. Those concepts do not easily match up with the new kinds of graduate work which I have suggested. Unless the funding authorities are prepared to utilize new standards of measurement, it will be increasingly difficult for us to offer new programs.

Finally, faculties are inevitably going to be uneasy during this period. They will be uneasy both about their security and about change.

Despite all of this, I am basically optimistic about where graduate education is going.

Robert Kirkwood

As I pondered the subject of this meeting, I must confess that I was stymied as to where to begin. To be quite candid, many of the institutions represented here have not been especially interested in nor greatly affected by regional or institutional accreditation over the years. And, until recently and still speaking in terms of the total institution, specialized accreditation of schools and programs has not been of much more concern either. In itself, that might not be a matter of any great moment, but its implications are.

For one thing, it suggests that complex institutions with important graduate centers have been less affected by periodic self-study and evaluation than their smaller counterparts, the undergraduate colleges. For another thing, it means that the objectives of some graduate schools and programs have not been subject even to occasional reexamination and appropriate modification or reaffirmation. For a third, it has often resulted in a disciplinary compartmentalization of many graduate schools, with departments which see themselves only in terms of similar departments in other universities, rarely in relation to other departments of their own graduate school. Equally rarely do they see themselves in relation to the total institution of which they are a part, or in relation to institutions in their immediate vicinity.

There is a variety of explanations for all of this, any one or combination of which can be made to sound reasonable or unreasonable. The point is not to rationalize or recriminate, but to look at where we are and to go on from here. What stymied me was how I could come to grips with the subject of evaluating graduate work in a way that would have meaning for an audience of graduate deans. Then I read *Scholarship for Society*, the report which the Panel on Alternate Approaches to Graduate Education has just published. This is a historic document which deserves serious attention by everyone concerned with post-baccalaureate education in America. I congratulate the Panel on a job unusually well done. *Scholarship for Society* has admirably stated the case for a comprehensive reexamination of graduate study in the United States. Now the challenge is: what to do about it?

It takes no great intellectual acumen to recognize the relationship between reexamination and evaluation, and evaluation is the heart of the accrediting process. Self-evaluation is carried on within the institution by its own personnel; evaluation related to accreditation is conducted on-site by a group of professional peers. *Scholarship for Society* points the way to a productive partnership between the graduate institution and the accrediting process.

There is a fundamental proviso, however, namely that accreditation must be seen as a vital and integral part of the academic enterprise. Attitudes and perceptions are critical in this as in all other activities. If the accrediting process is perceived as an extraneous exercise imposed from the outside to satisfy some bureaucratic agency, then it is doomed at the outset. If, on the other hand, accreditation is seen as a vehicle geared to serve internal institutional needs with the added dimensions of detachment and perspective gained through the observations and judgments of professionals from other institutions, then it can and will be used productively. It is often said that accreditation would have to be invented if it did not exist. Not only does it exist, but I submit that it is a dynamic process which can be adapted to the peculiar needs of each institution. **And,** it is important to remember, accreditation is not the objective but a means to the objective of strengthening each institution by assisting it to clarify its goals and to develop a keener sense of how they can be achieved.

Scholarship for Society states the case eloquently in this passage from pages 34-35:

> "One can cite many recent examples of institutional self-examination that have resulted in shifts of focus and resource, and, at the same time, in clarifications of purpose. Success in such enterprises appears to depend heavily upon the capacity of leadership to be realistic and imaginative in considering their mission. The voice of realism is necessarily harsh. It asserts that graduate institutions are not exempt from the thrust of the new principle of accountability: graduate institutions that do not define special roles for themselves, demonstrate their commitment to those roles, and establish their particular capacity to fulfill them are likely to find one or another of their undertakings rated inessential by state coordinating boards, or other consultative agencies. If the institution does not arrive at a clarification of its own appropriate mission, in light of its resources and those of the competition, the clarification will be effected by outsiders.

> "Realistic tones of warning, though, need *to* be tempered by a sense of possibilities. For, while accountability is often perceived as a threat, it can also be regarded as a challenge. Those who ask institutions of advanced learning to justify themselves are, by that very deed, offering such institutions a chance to engage in self-study, and are, in addition, providing faculties and administrations alike with a way of achieving unified visions of purpose — visions with personal meaning for researchers, teachers, and students. To make the latter point, in conjunction with the former warning, requires a tactful balance of leadership. It means asserting simultaneously that graduate institutions failing to raise and answer questions of mission for themselves will find they have been assigned missions from outside, and that graduate faculties responding fully to this challenge may add to their power and dignity."

Publication of *Scholarship for Society* is one of the fortuitous concatenation of events. The second is the Fleming study on *Meeting the Needs of Doctoral Education in New York State* which you all undoubtedly know well. The third is a study undertaken by the Graduate Record Examinations Board in cooperation with the Council of Graduate Schools. Several of you have participated in this project designed "to identify characteristics related to Ph.D. program quality and some acceptable ways to measure each characteristic. . . ." Written by Mary Jo Clark of the Educational Testing Service, *The Assessment of Quality in Ph.D. Programs: A Report on Judgments by Graduate Deans* points the way toward active and enlightened research "to study the assessment of quality by developing instruments and collecting data on programs in selected fields." The connection between this study and *Scholarship for Society* is readily apparent even to the most casual reader.

The fourth related event in this concatenation is a research project sponsored by the Federation of Regional Accrediting Commissions of Higher Education. Funded by a Danforth Grant, under the direction of Norman Burns, Director of the Commission on Institutions of Higher Education of the North Central Association, the Federation effort is aimed at developing new approaches to self-study and evaluation. Our primary interest is in shifting the focus in evaluation away from form and process toward a fuller assessment of outcomes. Many of you were unhappy about the ACE-Allan Cartter attempt to rate graduate schools, and the GREB study alluded to earlier is a response to the Cartter report. The Cartter study was hardly an objective analysis of educational effectiveness in the graduate schools listed. Most of us are also familiar with undergraduate colleges which base their reputation for excellence on the quality of their entering students, not on the qualifications of their graduates. I am not ready to say that our research will give us all the tools for analyzing educational effectiveness totally. Nevertheless, we expect to advance the frontiers of knowledge and expertise in this area. We know that there are many instruments for measuring educational growth already available that are largely unused. One aspect of our project is the compilation of a compendium listing all available tests, instruments, and other data or means related to the measurement of educational outcomes. With the increasing variety of educational experiences being offered in and outside of colleges and universities we must utilize the available tools and develop new ones to assist in discriminating between the real and the ephemeral, in measuring more realistically and effectively the relationship between our objectives and how fully they are realized.

In some respects, this is not greatly different from what we in regional institutional accrediting have been saying for many years. Our voices were not always heard, or at least our message was not always heeded. But times are changing, and the simultaneity of these four developments — the publication of *Scholarship for Society*, the Fleming report, the GREB study, and the Federation research project on outcome measurement underscore the nature of the changes.

If I may quote from the Federation's annual report,

> "In a world of educational flux and transition, it is only natural that the role and status of accreditation are undergoing significant changes. Some of these changes may have unpleasant implications to many familiar with the history and traditions of voluntary accreditation but the same may be said of countless other changes affecting higher education in the United States. Master planning, state systems, '1202 commissions,' coordinating boards, collective bargaining, external degrees, and a host of other concepts still have the ring of strangeness in academe. The point is not whether the changes are necessarily to our liking, but whether we can accept their reality in ways that will assure the continuation of accreditation as a non-governmental activity.
>
> "In essence, we are being challenged to shift the emphasis of accrediting activities from one which served the public interest indirectly to one which serves it directly. Until recently, it was simply assumed that the efforts of the regional accrediting commissions to improve the quality of higher education by strengthening individual institutions were *ipso facto* in the public interest. There is little question that they were, but because the regional commissions worked quietly they received little credit for their efforts, and often a good deal of unwarranted criticism. Meanwhile, the context in which higher education and accreditation exist was shifting rapidly, and public interest in both heightened appreciably. The fact that tax revenue invested in public and private higher educational institutions has expanded tremendously, plus a sharpened interest in consumer protection, have combined to make accountability a current catchword. Fortunately, this is not an alien concept to the institutional accrediting commissions, but it does create an inescapable imperative to make our work more responsive and respected than ever before, and more public.
>
> "We are in an age of consumerism with respect to postsecondary education, and accreditation is being viewed increasingly as an essential instrument for protecting consumer interests. The rising expectations generated by access to educational opportunities for larger and more varied constituencies must be fulfilled without sacrificing the integrity or weakening the substance of the educational process."

As I see it, we have a timely and unique opportunity. The graduate schools have been challenged to undertake a searching and fundamental reexamination of the purpose and place of graduate study in the broad scheme of American education. Institutional accreditation is also being challenged to demonstrate its viability and credibility. By responding cooperatively and drawing upon our considerable mutual resources, graduate education and the accrediting process can meet these challenges in ways that will convincingly demonstrate that scholarship is indeed for society.

Sterling M. McMurrin

The chairman has asked that I say something about the review of graduate programs, not discussing how it should be done but rather commenting on the advisability and value of such reviews. I presume that the reason for inviting me is that my University has for several years been involved in a very intensive program of review. In order to be somewhat specific and concrete, I would like to say a few things about the program which we have established, recognizing at the outset that every institution must establish such a review in its own way in accordance with its own academic habits and conditions. It would be a very unfortunate thing for American education if our institutions attempted to imitate one another or become like one another, thereby destroying the valuable diversity within our educational establishment.

At the University of Utah we have learned a great many things about the problem of review. Some of you have already participated in our program and are therefore acquainted with it. It required about two years for us to get into the review process, and I believe we are now in the fourth year of it. Our original intention was to review every graduate degree program at the University on a cycle of five years and to continue this as a permanent operation of the University. Unfortunately, we appear to be doing a fairly good job, and it has now become the lot of our Graduate Council and Graduate School not only to review the graduate programs but also the undergraduate programs of the University. We have taken on the undergraduate reviews with great reluctance. I don't know how that will work out as we are just beginning.

A remarkable degree of acceptance of this program of very critically and closely examining the degree offerings of the University has been received from the faculty. The review was initially developed within the Graduate Council but was officially endorsed by the University Senate. Although there are undoubtedly many critics, as far as we can tell it has the solid backing of the faculty as a whole and certainly of the administration. It costs us some money but we have had no difficulty in obtaining the necessary funds. In view of the addition of the undergraduate programs we intend to proceed now on a cycle of seven years. We assume that every department can be critically analyzed over a period of seven years.

We enlist the services of external consultants who are experts in the field under consideration. Although to date the external consultants have all come from other universities, we would be pleased to seek assistance from government or private industry. Internal committees which work as committees are recruited from outside the departments and, except for at most one member, outside the colleges of the departments which are being reviewed. Then follows a carefully worked out process of hearings, debates, and testimony with final recommendations going from the Graduate Council to the University Senate for action.

We have had remarkable response from people from outside the University whom we invited to participate in these reviews at comparatively modest honorariums. It is very obvious that the finest scholars are willing to take time out of their own work and engage in this kind of process. There are very few people who have turned down our invitation to come to the University and take a careful, critical look at what we are doing.

The point that I am interested in making first is that the acceptance of the program is a recognition by the departments that they may very well lose their degrees if they are weak. This sometimes has a kind of shaking of the foundations impact upon them. The departments generally have genuine respect for what is going on and are willing to devote a great deal of serious time and effort to the solution of their problems. The whole process has had a remarkable effect upon the University. I must say that in my years at the University of Utah, I have never seen anything comparable to it as an instrument for producing a good and critical analysis of what is going on, a willingness to face changing conditions, to become involved in new ways of doing things, to discard the old ways if this is indicated.

I have never seen anything that has produced such a willingness of departments to simply reform themselves. They begin to drop some of their unnecessary programs and degrees before we get to them. This happened especially after the first year. The first year we had a very large hassle with one of the departments. The word soon got around that we meant business, and the result is that departments begin to shape up before we get to them; and some departments shape up very rapidly after we get to them. I am referring to such things as quality of faculty appointments, inbreeding, problems of admission to tenure without adequate screening, the character and substance of the curriculum, programs that are simply uneconomical from the standpoint of the department, college, or university and unwise in terms of the nation's manpower needs and student interests — the whole scope of the educational process.

I might say, in relation to the position taken by Robert Kirkwood on the value of accreditation, that we got into this review business because way back in the fifties I was aware that the accrediting association in its reaccreditation of the University of Utah commented very emphatically on the question of whether or not, following the war, the University had become involved too rapidly in too many Ph.D. programs. I personally was of the opinion that this was what the University had in fact done. Ten years later, it fell to my lot to prepare the University's case for reaccreditation with the Northwest Association. I was aware that again they were going to breathe down our necks on the matter of whether we were competent to handle all of the Ph.D. programs which we had. I personally felt that we were not. I entered into our accreditation documents assurance that we were going to establish an intensive review of our graduate programs. Having done that, it became necessary for us to get busy and do the job. This is a case where a regional accrediting association's pressure was very well placed and where it produced excellent consequences within the institution.

I would like to say that, generally speaking, in encountering problems of this kind we can face them in terms of four basic educational categories, all of which have been mentioned earlier. I will simply repeat that we deal with the goals, purposes, and objectives of education, the substance of education, the methods of education, and finally, what might be called management of educational resources. I say the purposes, goals, and objectives because there is nothing more important at the present time than for us to continually define and redefine what purposes we are seeking to establish in American education generally, what goals we are setting for our own institutions, and what objectives we are pursuing in the classroom and laboratory.

The general purposes of education, it seems to me, are determined by the character of the society. Our society as a democratic society, I would think, defines for us three basic educational purposes. These have to do with the strengthening of the culture, the criticism and perpetuation of our social institutions, and the achievement of the intellectual wellbeing of the individual. It is a presumption of a democratic society such as ours that when we devote ourselves effectively to the wellbeing of the individual, we at the same time bring increased vitality to the culture generally and effectively criticize and strengthen our social institutions.

The goals of the individual colleges and universities, I believe, deserve at least one comment, that in our kind of society they should be multiple and diverse. It would be a very serious error on our part, as it often is, if we moved toward the destruction of educational diversity, because much of the quality of life which we value most is found intrinsically in the pluralistic character of our culture. The destruction of diversity in education would destroy the pluralism of our culture.

In the matter of the objectives of instruction, I think that we have to observe at least three things. These objectives are cognitive, affective, and conative or volitional. Now obviously the cognitive facet of education is basic to the whole structure of education, which has to do primarily with knowledge and the uses of reason. I think that any educational program which departs from this as its foundation is in very serious danger of failure. But it becomes increasingly obvious that we have not fulfilled the obligations of education if we achieve only cognitive ends. If we are to produce an educational product of high merit we must give attention to affective ends which have to do with human sympathy and the basic emotions and conative objectives which are concerned with decision and action.

On the matter of the substance of education, the content or the curriculum, I would like to say one thing. I refer to the problem of the divisive segmentation of knowledge that occurs in our colleges and universities possibly in part because of the necessity of specialization to a high degree, but to some extent because of the unfortunate administrative necessity for departmentalization in the organizational structure of the institutions. But certainly there is a great need for us in some way or another to come to grips with the general continuum of human knowledge and human experience and design curricula and programs which do justice to that continuum in the life of the individual.

A brief comment on the means of instruction. I refer here to the problem of means and ends, a matter which continually plagues us. I will simply say that all of us here today, having a somewhat pragmatic background to our thinking, recognize that you cannot extricate means from ends nor separate ends from means. Still we must recognize that it is most unfortunate for a society which is geared to high level technology when ends are simply determined by means. This condition could produce, if it were carried to an extreme, as it often is, a technological order destructive of the humane quality which we are so desirous of achieving in our social order. In educational institutions to permit the means, whatever they may be to be the chief determinants of the ends leads to a dehumanizing of the educational process. Though we cannot separate them, there must be a reciprocal relationship between means and ends. It is to be hoped that our educational purposes and ends are always determined by basically humane considerations and not by the forces which move us almost inevitably toward a technological order.

Just a final word on my fourth point, the matter of the management of educational resources. Here I refer back to the assumptions which were made by President Fleming. We seem to be entering upon a no growth era and we may expect to be up against some very severe problems from the standpoint of financial resources. The management of those resources now becomes a major problem of higher education and certainly of graduate education, much more acute than in the past. The effective and efficient management of our resources means that among other things, we must turn to a consideration of the purposes and goals of education. In some way or another we must design programs that make sense in terms of what is needed by our society, that satisfy the aspirations of the individuals who are our students, that meet the capabilities of our institutions when assessed in terms of the resources we are likely to have. This, it seems to me, means that there must be a great deal of tightening up, of eliminating things that we have been doing that are unnecessary, of rethinking and reevaluating virtually everything with which we are involved. This is the reason why I personally believe that ongoing programs of critical reviews of our graduate schools are becoming virtually a necessity for the future.

Discussion Groups

Thursday, December 13, 1973, 10:45 a.m.
Friday, December 14, 1973, 9:00 a.m.

EVALUATION OF GRADUATE PROGRAMS

Moderator: Arthur C. Gentile, *University of Oklahoma*
Panelists: Frank E. Horton, *University of Iowa*
John T. Kirby, *Florida Atlantic University*

Arthur C. Gentile

It has been said that not every problem that is faced can be solved, but that no problem can be solved until it is faced. I think the distinguished speakers we heard this morning brought us face to face with the problem and I would hope that our discussion now would concern itself largely with solutions and mechanisms by which these problems can be faced and solved.

So to begin with, I am going to ask the panelists to say a few words which hopefully will stimulate further discussion on your part.

Frank E. Horton

My perception is that the majority of you are primarily interested in the operational aspects of graduate program review rather than broad overviews. That being the case, Dean McMurrin's comments appear to be the most appropriate avenue for further discussion. Before we begin you should note that the group at this table are members of the Committee for Internal Evaluation of CGS. We met last night and are currently developing an outline which, given CGS support, will culminate in a monograph focusing on the general principles of graduate review and elements and actions important in the review process. Any of you who have comments or suggestions for the Committee should write to Art Gentile or other members of the Committee.

More to the point, my feeling was that the audience was particularly interested in Dean McMurrin's comments and I thought that it would be appropriate for me to point out some aspects of the review process that we have initiated at Iowa. The University of Iowa has embarked on a systematic review of all graduate programs which will be repeated each five years. The process grew out of a concern of the central administration and the faculty that they be allowed to conduct their own internal review operations, as opposed to the utilization of guidelines and criteria which may have been generated outside the university community.

In developing the review process, I should note that our concern at Iowa was not only graduate programs but also the undergraduate and professional programs. While this is at odds with Dean McMurrin's approach, we felt that the amount of effort that goes into such evaluation efforts makes it necessary that review activities not be duplicated by multiple committees reviewing different programs of a single department. I would assume that most institutions are similar to ours in that the graduate program is intertwined with undergraduate programs. This seems inevitable when departmental resources are being used to support both undergraduate and graduate programs. Thus, a review of graduate programs isolated from the total mission of a particular program or department seems difficult at best. Since faculty members rightly feel that they have something else to do beside review programs, it is necessary to look at the efficacy of several committees reviewing a single department.

Our approach was to develop a graduate program review statement outlining the specific needs of the graduate college. The statement, unfortunately not as brief as Dean McMurrin's, attempts to outline the general philosophy of the review process at the graduate level and those elements which are of particular concern to the graduate college. If any of you are interested in a copy of that document, feel free to write to me. The graduate program review statement was reviewed and adopted by the graduate council as a working document.

This is the second year of our review program. We have completed several reviews and our experience is similar to Dean McMurrin's in the sense that several programs came forward and requested termination prior to the review process. Given that we are on a five-year review cycle we are reviewing approximately twelve programs per year.

Upon completion of the initial review it became clear that the University lacked an administrative closure policy. That is, after the review is completed what happens? I am pleased to report that a closure policy has been developed and adopted by the Council of Deans. This policy focuses on the communication of the recommendations of the review committee and the structuring of discussions by the collegiate deans with appropriate central administrators and with the program being reviewed.

As mentioned earlier, Iowa's review process focuses on both undergraduate and graduate programs and thus is carried out under the joint auspices of the graduate college and the appropriate collegiate dean. Although the graduate college and the other dean sometime have differing objectives, we have developed a close working relationship with each of the other collegiate deans and have been able to alter the review process to accommodate specified joint needs. This approach necessitates varying the process slightly in order to address structural and substantive differences in programs in each of the nine other colleges in the University. To date we have successfully worked out arrangements with several of the colleges and are currently discussing alternative approaches with the few remaining.

I think this brief statement will provide you with sufficient information to ask general questions which in turn will allow us to define general problem areas which require more detailed discussion.

John T. Kirby

I think we have traditionally operated our programs on a faith basis.

Two nuns were driving down the Florida Turnpike and they passed the plaza where the fuel stations are located by about three miles when their car started to sputter and stopped; they were out of gas. They got out, and didn't know what to do. Finally, they walked back the entire three miles to the plaza and spoke to the station attendant. The attendant said, "We have gasoline but we are completely out of any kind of container for you to put the gasoline in." So, perplexed, the two women searched the area diligently for a container. Finally, in a brushy corner behind the station they located a baby potty; it wasn't very clean but they washed it out, dried it, and then put almost two gallons of gasoline in it and carefully walked the three miles back to their car. Now, visualize these two sincere women, with traffic swirling past, trying to pour gas into their automobile out of that very difficult container. Two hippies came by in their strangely painted old car and were puzzled about what was going on. One looked at the other thoughtfully and said, "Man, that's faith."

Our various clienteles aren't willing to exercise this kind of confidence any longer, and, so, we have been asked to exercise a different kind of control rather than faith. The Florida State University System has a quantitative control on graduate and undergraduate programs. This state mandated policy is quantitative in nature; it is not qualitative. A department and a particular degree program must, over a three-year period, have a prescribed number of graduates if it is to continue its graduate program. At the doctoral level, a program must graduate an average of two doctorates per year, or a total of six, over a three year period, or the program is considered underproductive and is put on probation. If a department has a doctoral program in a particular discipline, it must graduate a total of fifteen master's candidates, and thirty baccalaureates, in that three-year period. If the highest degree offered in a discipline is the master's then the numbers are reduced and a program must graduate a total of nine master's, and a total of thirty baccalaureates over the three-year period. And so on. I am just giving you a glance at the structure of the quantitative requirements in terms of the productivity of programs required by our Board of Regents. Universities are given an opportunity to justify continuation on a smaller scale before action is taken. A program may be on probation for three years. After three years, if it does not meet the general average requirement of production, it has to be eliminated, phased out or modified. There have been objections to these expectations within our state, but it is the policy under which we currently function.

At Florida Atlantic University we have attempted, albeit imperfectly, to take a look at programs in terms of quality and quantity of operation. We have completed what we term an academic audit of all programs, undergraduate and graduate. In this audit, each department was asked in rotation to present information which indicated the demands for a program, how those demands are met, the way in which the program functions, the faculty situation, the student admission criteria, and the programmatic criteria. Participating in this review were the president, all the vice-presidents, and the appropriate deans. In retrospect, the reviews were imperfect. We failed to meet a criterion which Frank (Horton) mentioned and which I find to be extremely and extraordinarily important, the item which he termed "closure." We need to determine what use we will make of the information when we have it. Are we going to make use of it to improve programs and if so, how? If improvement is not probable or feasible, then how are we going to change, phase out, or terminate the programs which do not meet our criteria?

I think we have to be concerned with both the process of graduate education and the product of graduate education. Traditionally, we have thought almost entirely about process. We have been concerned about the nature of our faculty, the quality of teaching, and the kind and quality of research. We have been concerned with the nature of the program which is available for students. This is all an examination of the process. It does not examine the end product. More and more, particularly in the professional areas, contrasted perhaps with the arts and science areas, we have to become interested and concerned about the product, that is, the capabilities of the graduate student who completes our doctoral or masters' programs. Measures and indicators in this area are terribly difficult, but, in my opinion, possible at least in part. We have an obligation to work toward developing such a methodology. Certainly, longitudinal follow-up studies are appropriate but faster measures having high correlation with these measures need to be developed.

GOVERNANCE AND ORGANIZATION

Moderator: John K. Major, *New York University*
Panelists: Jan Rocek, *University of Illinois, Chicago Circle*
Charles G. Mayo, *University of Southern California*

John K. Major

Three years ago, the Executive Committee of the Council of Graduate Schools appointed a Committee on Graduate School Governance and Administration to develop models of governance, to study ways to introduce new flexibilities into models of control, to assess the costs and benefits of increased student participation in the decision-making processes, and to study the usefulness of the graduate faculty and its relationship to other bodies and officers.

Models of governance are so varied that the committee felt it would be less useful to enumerate actual models, and instead would like to suggest conditions considered essential to any proposed structure of graduate school governance and administration.

This morning I would like to present to you the report of that committee, which consisted of Fred Andrews, Vice President for Research and Dean of the Graduate School at Purdue University; Thomas Rumble, Dean of the Graduate Division at Wayne State University; Otis Shao, Dean of the Graduate School at the University of the Pacific; and myself.

Effective governance and administration requires a continuing interaction between formal structure and the people who occupy the structure, and particularly a balance between a centralization of functions and their decentralization. Nowhere is this balance clearer than in higher education in general and graduate education in particular.

Higher education is structured in two dimensions: areas of learning, where one learned discipline is distinguished from another, and levels of learning, where one degree is distinguished from another (often through institutional nomenclature: two-year colleges, four-year colleges, universities). Each member of the faculty is always faced with obligations both to his discipline and to his institution. In a single discipline, instruction ranges from elementary "service" courses to postdoctoral scholarship of the most advanced nature, and the differing goals of undergraduate and graduate education clearly justify different approaches, methods, and structures. Graduate schools are responsible for the advancement of learning through scholarly research and for instruction leading to the nonprofessional* master's and doctor's degrees. Their governance and administration should reflect these unique roles.

---

* Nonprofessional degrees are distinguished from professional degrees not only by their nomenclature but also by their emphasis.' Nonprofessional degrees stress creative scholarship and research, often but not necessarily as a preparation for a career in college or university teaching; professional degrees are intended to prepare for a career in the practice of a profession and are usually accredited by a national organization independent of the universities, representing a single profession, to assure that the program meets the needs of society and of the profession.

Decisions should be made where they have the benefit of expert and informed knowledge and relevant experience. Consequently it is ordinarily the faculty which determines the admission and degree requirements of an institution; the administration which decides the allocation of resources among competing demands; and the student body which usually acts on matters in the area of "student affairs" — each with the advice of the other two. Institutional bylaws typically and explicitly commit to the faculty the educational conduct of the school; the responsibilities of the administration are far less clearly defined, and the duties of students rarely if at all.

The faculty is the heart of each institution, and as scholars with common interests have joined to exploit them, the building block of the faculty has become the department, which encompasses a single discipline. The governance of a department depends a great deal on its stage of development: a rapidly changing department, whether new and growing, or old and moribund and crying for rejuvenation, requires strong individual leadership by the chairman, while mature and stable departments rely on the collective leadership of the senior faculty. The advantages of the departmental structure are significant:[2] decision making and initiative reside where the expertise is, decentralized decision making offers many administrative advantages, and the departmental model mobilizes departmental responsibility. Its disadvantages include its resistance to change and its difficulty in accommodating interdisciplinary approaches.

Related departments form a school or college, and the nature of the graduate school too depends on its stage of development:[3] a new school with new departments and new programs calls for greater control, at least until a degree of stability and recognition is achieved, while established departments tend to run themselves, especially when the quality of their programs is high and the need for intervention minimal. Both, of course, require from the administration, for reasons of efficiency, economy, and convenience, necessary centralized services such as accounting, data processing, registration, and library and other facilities. But the administration is accountable for the quality of the institution, whether the program is new or old, and must assure a responsiveness to changing needs and circumstances. The quality control of programs is essential; even established departments can benefit from periodic reviews by outside scholars responsible only to their discipline and by colleagues in other departments responsible both to their institution and to the world of scholarship in general.

Since graduate studies are specialized and since specialized expertise resides in the departments, the graduate school is inherently decentralized and department oriented.[3,4] It has the obligation to maintain the highest standards of scholarship in its constituent departments, and to provide the departments with the services they require. The changing frontiers of knowledge and new alliances among specialists make it imperative for graduate schools in addition to offer both faculty and students the opportunities for innovative interdisciplinary studies without compromising the quality of scholarship.

The governance and administration of graduate education takes many forms. Spurr[3] has pointed out that a university must have a graduate program, but it does not need to have a graduate school, which is, in a real sense, superfluous and an anomaly in the American university today. Some universities have a graduate school headed by a dean, others a division of graduate studies headed by a dean, director, or vice president; the administration of research supported by outside agencies may or may not be a responsibility of the graduate school, and some universities do not recognize a separate graduate faculty. The duties of the officer chiefly responsible for graduate education may or may not include budgetary decisions or faculty promotion and tenure decisions. In any event, three functions are essential to the graduate school: the approval of programs, the admission of students, and the recommendations for degrees. Five others are usual: decisions on student progress and conduct; academic records; allocation of student financial aid; support of faculty research; and the oversight of sponsored research.

The typical graduate school is parallel to the undergraduate school and is headed by a dean, who is generally consulted on budgetary, promotion, and tenure decisions, but whose full budgetary responsibilities are limited to his office operations and fellowships and scholarships.[5,6] Policy decisions affecting graduate education are made jointly by a committee of the faculty and the dean, although the most important issues are usually referred by them to the whole faculty. Most universities have self-perpetuating graduate faculties; membership presupposes attainment of the highest degree and demonstrated competence in research, and is prerequisite to responsibility for graduate courses and thesis or dissertation supervision. New graduate programs must be approved by the faculty, after review by the committee and the dean, before final approval by higher bodies such as the governing board and, to an increasing extent, state authorities responsible for coordinating graduate education. Student participation is increasing, but in an advisory rather than a voting role, and more and more on a departmental level where change is often easier to achieve.

Clearly a wide variety of successful structures complicates any attempt to generalize, much less prescribe, but the following conditions are suggested as minimal for the effective governance and administration of graduate education:

1. Graduate education should be the responsibility of a dean reporting to the chief academic officer who has budgetary authority. He should be a major participant in all budget, space, and personnel decisions affecting graduate education, and should be responsible for the admission and graduation of students and the approval or disapproval of new and continuing programs.
2. Only those members of the faculty whose education or experience in the judgment of the dean qualifies them should be responsible for instructing and examining graduate students and approving or disapproving theses and dissertations.
3. Admission and degree requirements should be the joint responsibility of the graduate faculty (or a committee of that faculty) and the dean.
4. Graduate programs should be evaluated regularly in view of changing circumstances, and programs which do not meet quality standards or local or national needs or cannot be adequately supported should be suspended or terminated.
5. Policies applying to sponsored research should be the joint responsibility of the graduate faculty (or a committee of that faculty) and the dean.
6. Students should participate in an advisory capacity in formulating policies governing graduate education, including curricula and staff-

ing, but should not participate in any deliberations leading to decisions affecting individual students or members of the faculty.

REFERENCES

[1] "Policy Statements Concerning the Nature and Naming of Graduate and Professional Degree Programs, the Accreditation of Graduate and Professional Degree Programs, and the Award of Advanced Degrees by Institutions of the Federal Government." Council of Graduate Schools in the United States (1969).

[2] "The Study of Graduate Education at Stanford," Report to the Senate of the Academic Council (Stanford University, June 1972), p. 18.

[3] "The American Graduate School," Stephen H. Spurr, The Graduate Journal, Volume VIII, Number 2, pages 251-265 (1971).

[4] "The Organization of Graduate Work Within the University," Council of Graduate Schools in the United States (1967).

[5] "The Comparative Governance of Graduate Schools," Gerald B. Kauvar (presented at the 1970 Summer Workshop for Graduate Deans, Council of Graduate Schools in the United States, Brainerd, Minnesota, August 19, 1970).

[6] "Some Aspects of Graduate School Administration," Bernard J. Downey, Associate Dean of Graduate Studies, Villanova University (December 2, 1970).

Jan Rocek

When Dean Major asked me to participate in the discussion of this group concerned with the governance and organization of graduate schools, my first reaction was: "Is there [illegible] anything which can be added to this subject? Anything which is not a[illegible] included in the report of the committee which you just heard or in Stephen Spurr's article 'The American Graduate School' published several years ago in The Graduate Journal?" I still remember my impression upon reading Spurr's paper when it first appeared: it seemed to me a complete description of what a graduate school is all about and how it goes about its business.

I believe that Dean Major also must have been quite impressed by Spurr's article, because he included a copy of it with his invitation. This gave me an opportunity to re-read the article which I did essentially to find out whether there was anything which could be added. When I did so, I was quite shocked. What only a few years ago appeared to me as a complete description of an ideal graduate school read now as a historical note on what graduate schools used to be in the 60's before the "Ph.D. glut," budget cuts, retrenchments, and before state coordinating boards.

Spurr's "complete" graduate school performs eight basic functions: It (1) approves graduate programs, (2) controls the admission of graduate students, (3) recommends students for degrees, (4) keeps academic records, (5) is responsible for graduate student discipline, (6) distributes fellowships, (7) handles faculty research support and (8) coordinates sponsored research.

In the graduate school as I know it, a graduate school of a new and growing large urban campus of an old and distinguished land grant university, these functions, or at least most of them, are still present and are indeed among its concerns and responsibilities. However, recent changes in attitudes towards graduate education, in available sources of funds, and in the state's role in university governance, have pushed many of these functions into a secondary position.

A graduate school of a developing institution in the 70's must perform these four principal functions:

(1) Advocacy of graduate education within the institution.
(2) Development of graduate programs.
(3) Development and administration of inter-unit programs.
(4) Acting as liaison between the institution and the state coordinating agency.

I should like to emphasize that these new functions are here in addition, not instead of the functions listed by Stephen Spurr. Also, to a large extent they may be characteristic only of a special type of institution with which I have some experience and may not apply at all to many other institutions.

I hope that you will permit me to elaborate on these four functions in some detail:

(1) The function listed first, the advocacy of graduate education within the institution may seem superfluous; everybody is in favor of graduate education, of scholarship and research. They are like motherhood, virtuous, beautiful, respected, and expensive. So we have birth control and are witnessing traumatic and demoralizing abortions. Under these conditions, the university needs a strong spokesman for graduate education, for scholarship and research within the administration, somebody who has no other commitments, someone who is not concerned with immediate enrollment pressures, with the 300 freshman who did not get into Psych 101, or with the problem of finding someone to teach the special rhetoric class. A strong spokesman for graduate education and scholarship is needed when it comes to decisions on institutional priorities and commitments and when the long range plans, goals, and mission of the university are formulated. At UICC we just went through such an exercise and the graduate college, i.e. the graduate council and the dean's office, were heavily involved in the process of defining the scope and mission and the long range goals of the campus. This undertaking may well influence the nature of the whole character of the institution for many years to come.

(2) The second function on my list, but the first one in terms of importance, is the development of graduate programs. "Development" is a different concept than "approval." In the present situation, the graduate school must assume a much more active part than it did in the past. In the past it has usually responded to a program submitted by the department, determined whether or not the department has the requisite faculty strength and has developed a reasonable curriculum, and made sure that there are sufficient physical facilities and library resources available for the program. The present role of the graduate school is quite different. The dean and the graduate council have to take into account not only the mission of the institution, not only the strength and resources within one given department, but existing programs and resources in related departments and units within the

university, within the institution, and within the geographic region. They must consider the employment situation both locally and nationally and must be aware of and respond to student needs. The graduate school must therefore work closely during the development phase of a program with the department and often with several departments or units. The graduate school should selectively encourage certain programs which fit into the institutional priorities; often one has to bring together people from different groups to develop them. The UICC graduate college, to give an example, has played a major role in the development of the Doctor of Arts program. It also helped in the development of interdisciplinary programs in urban planning and policy, in ethnic studies, and we currently have a committee putting together a Master of Administrative Sciences program.

(3) The third function closely connected with that just discussed, concerns inter-unit programs. These become more and more important and some of the reports which we have heard here pointed very strongly in this direction. Programs which are not entirely along disciplinary lines are offered by a combination of units; they are inter-departmental, inter-collegiate, inter-campus, and inter-institutional. All of these categories are represented in our institution. The role which the graduate school plays in their development and in their administration becomes much larger than it is in a normal program where the program faculty essentially coincides with the faculty of one given department.

(4) The fourth new and important function for the graduate school is to act as an informal liaison between the institution and the state coordinating board. While the formal contact goes through the president and the board of trustees, it is important for the graduate school to develop an informal relationship with the staff at the state coordinating agency. The whole area of program development can be greatly facilitated and improved if there is a better understanding and closer cooperation with the state coordinating agency at the time of program development.

In these remarks I tried to show how decrease in support, both financial and moral, the necessity of considering many extra-academic factors, and loss of a great deal of independent control over new graduate programs have changed the functions and the priorities among the functions of the graduate school in the 70's. Also, changed is the job of the graduate dean: it is now more difficult, more time consuming, and a great deal more frustrating; however, I do not think that it has become less interesting.

Charles G. Mayo

I am going to direct my remarks to two particular functions of the graduate school as they relate to the organization of the graduate dean's office and to the role that the graduate school ought to play in a university's policy-making structure. My comments are, of course, heavily reflective of my experience at my own university, but I hope that they will assist in generating discussion that will permit development of principles which will have generalized applicability.

The first area of concern that I wish to discuss is the quality control function of the graduate school and the relationship of the graduate council to that process. To be more specific, I want to zero in on the graduate council as an agency of reform.

Let me start by saying that I believe that a graduate council comprised of faculty members and students who have demonstrated a commitment to, and understanding of, graduate education and research is essential to the proper functioning of any graduate school, but I am prepared to argue that the role that the council should play will bear a relationship to the maturity and the quality of the university in its endeavors at the graduate level. What I am suggesting is that the newer and/or less distinguished a graduate institution is the greater ought to be the role of the council and the graduate dean in the quality control process. In the developing university the council has a special responsibility to ensure that the university does not undertake graduate obligations for which it does not have adequate resources. This can be an onerous and distinctly unpopular job. A propelling force in such an institution is the drive to attain the status and prestige that hopefully will be achieved by offering Ph.D. level studies. Too often, though, possible academic distinction for a university is lost because it tries to do too much. It seems to me, furthermore, that at a time when the placement opportunities for graduates have been critically restricted in some fields, the council has a moral duty to consider proposals for new degrees with extraordinary caution.

The graduate council is an important quality control mechanism in any university but it assumes an accentuated importance in the institution that is attempting to upgrade the quality of its programs. I would call this the reform mode of quality control. My university is an institution in which "reform" activities have been very prominent in the operations of the graduate council — called on our campus the University Council on Graduate Education. Chaired by the graduate dean and staffed by liberal arts and professional school faculty and students appointed by the president of the university on the recommendations of the graduate dean, the council has the following mandate:

1. to review all proposals for new postbaccalaureate degrees, including those in law, medicine, and dentistry;
2. to review proposed major changes in existing programs;
3. to review periodically all postbaccalaureate programs; and,
4. to disestablish degrees and programs that do not meet minimum standards.

In the past three years two Ph.D. degree specializations have been terminated, five proposals for new postbaccalaureate degrees have been turned down, and new chairpersons have been recruited for several areas of study. Recently two proposals for master's degrees that emanated from professional schools were rejected by the council, and another proposed professional degree was substantially modified as a consequence of council review. The council has approved a few new degree programs in recent years — primarily in inter- and multidisciplinary areas — but approval has come only after extensive review.

This brings me to the subject of the relationship between a graduate school and professional schools. I should point out that at USC the graduate school has jurisdiction over all Ph.D. areas — some 47 in number — and all academic master's areas — some 53 in number. As a consequence of its control over the Ph.D. fields and because of the establishment of a number of degrees that are joint between the liberal arts and professional schools, the graduate school relates directly or indirectly at the present time to all the other schools of the university save two. I think that the relationship between the graduate school and the professional schools has been reasonably good, but I must say that the fact that the dean of the graduate school chairs the University Council on Graduate Education has led to a few strains. This tension has been heightened, I fear, by the fact that the associate and assistant graduate deans of the graduate school provide staff assistance to the council. Alas, I feel that this friction between the graduate school and the professional schools is inevitable — at least it seems to be built into the USC educational system — and I have resigned myself to a certain degree of unpopularity when professional school proposals are subjected to review by the council. To understate the matter, the liberal arts areas accept the concept of review much more readily than do the professional schools. I would hope that we can have some discussion of this problem today.

Let me turn briefly to the second function of the graduate school to which I would like to address myself: the graduate school as the guarantor of due process to students. This is a rather new function, one that most certainly has been augmented in recent years. An obvious manifestation of the increased importance of the function is to be found in the rash of law suits brought against universities by students who allege that they have been treated unjustly by faculty and administration. I must admit that perhaps I may be a little too sensitive on this matter of the graduate school being concerned with due process because I am presently being sued by a disgruntled former graduate student, but I sincerely believe that the graduate school has both a moral and a legal responsibility in this area. At the very minimum, the graduate school must insist that departments maintain complete records on all students and that it be included — indeed be more than simply informed — in the decision to terminate the career of a graduate student.

One last point that I would make is that the problem of due process is heightened in a university in which the reform process is decidedly under way. Inevitably students are caught between the old and new standards of performance, and it is the graduate school that may on occasion have to mediate the differences between the department and the student.

NEW DEVELOPMENTS IN COLLEGE TEACHER PREPARATION

Moderator: Alvin H. Proctor, *Kansas State College of Pittsburg*
Panelists: Mary Ann Carroll, *Indiana State University*
Charles A. Leone, *Bowling Green State University*
Frank J. Vattano, *Colorado State University*

Alvin H. Proctor

This program deals with the preparation of college teachers, and I will merely say that this is a topic that has been before the Council of Graduate Schools for at least five years. We established a Committee on the Preparation of Community College Teachers in 1968 and then a year later dropped the term "Community College" and renamed it the Committee on Preparation of College Teachers, meaning undergraduate colleges, whether in a university or a four-year college of some type. Then, another development which produced a lot of heat was when the Doctor of Arts first came to the foreground. It precipitated intense and even acrimonious discussion and as a result of those discussions, there have been two conferences at Wingspread on the Doctor of Arts as one alternate approach to the preparation of college teachers. The first one was held in 1970 and the *Proceedings* of it were published. Just this October, there was an invitational conference to those who had established Doctor of Arts degrees, again at Wingspread.

Consequently, there has been a great deal of attention to this, and one does not underline the point. I will simply say that I think there has not been enough discussion about the Ph.D. as a possible, very viable, and even traditional degree for the preparation of college teachers.

At any rate, today we have three people whose institutions are involved in the better preparation of college teachers. The papers prepared for this session represent that fact. The members of the Panel are Dr. Frank Vattano, who is Associate Vice President for Academic Affairs at Colorado State University, Dr. Charles Leone, who is Vice Provost and Graduate Dean at Bowling Green State University, and Dean Many Ann Carroll from Indiana State University.

A Professional Development Project for Comprehensive College Instructor Preparation*

Charles A. Leone

Concern for improving postsecondary education is a matter of historical significance. Indeed, what has been termed the "Crisis in Higher Education" inaugurated a whole new pattern of thought about the nature of the undergraduate experience and the role of the university in the new social and cultural context of the past decade. A documentary, "The Semester of Discontent," was completed in 1965, and "Improving College Teaching" became the theme of the American Council on Education in 1966. John D. Millett, Chancellor of the Ohio Board of Regents, mandated action, when he called upon Bowling Green State University and three similar institutions in the state to prepare prospective college instructors to meet the needs of existing and emerging institutions of postsecondary education. Since preparation patterns for college instructors influenced degree requirements in graduate programs, Charles A. Leone, Dean of the Graduate School, became primarily responsible for the college-level teacher training effort of the university.

---

*Supported, in part, through a grant from the Fund for the Improvement of Postsecondary Education.

Bowling Green State University has a long tradition in the preparation of teachers (K-12). It consistently ranks among the top twelve producers of certified elementary and secondary teachers in the nation. The preparation of elementary and secondary teachers is implemented as a campus-wide activity; however, previous efforts to provide a comparable amount of preparation for prospective teachers in postsecondary education have been largely fragmented and isolated. Now the old model, where a scattered and isolated department could jealously guard its resources and minutely regulate its students who remained locked into rigid degree programs, is yielding to a far more dynamic image, whereby graduate students can and do supplement their education in an academic discipline with formal training in the art and dynamics of teaching in higher education. Without the coordination and leadership provided through a Professional Development Project in the Office of the Graduate School, no credible campus-wide awareness of problems in postsecondary education or general support for their multi-faceted solutions would be possible.

The dean felt that there was a plausible point of departure in maximizing the training possibilities for professional preparation among graduate assistants and teaching fellows. He organized an *ad hoc* committee of several faculty members (Theodore J. Jensen, Joseph E. Kivlin, Elmer A. Spreitzer, and Waldemar C. Weber) to obtain ideas and reactions from departmental representatives on exploiting the potentials for improving postsecondary education through efforts directed primarily at graduate assistants and teaching fellows. Broad encouragement was provided to study and develop the concept. Views of graduate students were obtained through a seminar-research course in the College of Education, in a meeting with the Graduate Student Senate, and from a graduate student representative on the *ad hoc* committee. The Graduate Council sponsored several campus-wide conferences designed to explore the ideas in depth and to develop plans for a formal program that would enhance the professional preparation of graduate students for functioning in a vast educational enterprise at the postsecondary level. Paul R. McKee, another faculty member, was recruited to teach an orientation workshop on Instruction in Higher Education as an initial university effort in the program. Meanwhile, the seminar-research conducted course by Theodore J. Jensen in the summer quarter of 1972 revealed that graduate students were interested in upgrading their skills as college instructors and in adding substantive evidence of the skills to their placement credentials so as to help them compete for teaching positions in an increasingly tight job market.

Six definitive phases (Figure 1) in the professional development of graduate assistants and teaching fellows emerged from the *ad hoc* committee's study of data, case histories, and various expressions of interest and concern. Collectively, the six phases or programs were identified as the Professional Development Project. Although the phases are designed to benefit graduate students, implementation of them will also improve the quality of undergraduate instruction wherever graduate assistants or teaching fellows are involved. They also stimulate faculty interest in the improvement of postsecondary education and provide opportunities in which contributions can be made by persons of many different skills and interests in the university.

The first three phases are applicable to all graduate assistants and teaching fellows. The next three phases are primarily intended for students in departments offering the doctorate or a master of arts in teaching. Summary descriptions of the phases are as follows:

> *Choosing Careers in Higher Education.* Special recruiting, screening, and counseling services will be provided for students who aspire to college teaching careers, especially for individuals whose demographic characteristics are presently under-represented in higher education.
>
> *Workshop on Instruction in Higher Education.* An intensive presession interdisciplinary workshop on instruction at the college level will be given each fall to new graduate assistants, teaching fellows, and other interested persons.
>
> *Departmental Courses, Practica, and Evaluation.* The workshop mentioned above will be followed by departmentally sponsored courses on college level teaching that stress discipline-bound aspects of the profession and that provide graduate students with supervised teaching experience in a classroom.
>
> *Advanced Program Support Courses.* Candidates for the master of arts in teaching or the doctor of philosophy will be encouraged to participate in several interdisciplinary campus-wide service courses that deal with the philosophy, psychology, sociology, and organization of the teaching profession at the postsecondary level.
>
> *Special Inter-institutional Relationships.* Using the off-campus internship programs in clinical psychology, college student personnel, and educational administration as models, the graduate school is developing cooperative arrangements with appropriate off-campus institutions in order to provide internships in college teaching and related vocational areas.
>
> *Credential Enrichment and Placement Services.* Credential files for project participants will be prepared under the leadership of the placement office. They will document teaching experience by including such things as video tapes and classroom teaching performances. The information will be of value to prospective employers and will be helpful to individuals themselves who are seeking meaningful employment in postsecondary education.
>
> *University Extension Services.* As the various phases of the project are implemented, it is hoped that the overall project can serve as a model for professional development programs at other universities. Moreover, it is expected that some aspects of the project can be packaged and exported to other educational institutions through a Resource Center for Professional Development (Figure 1).

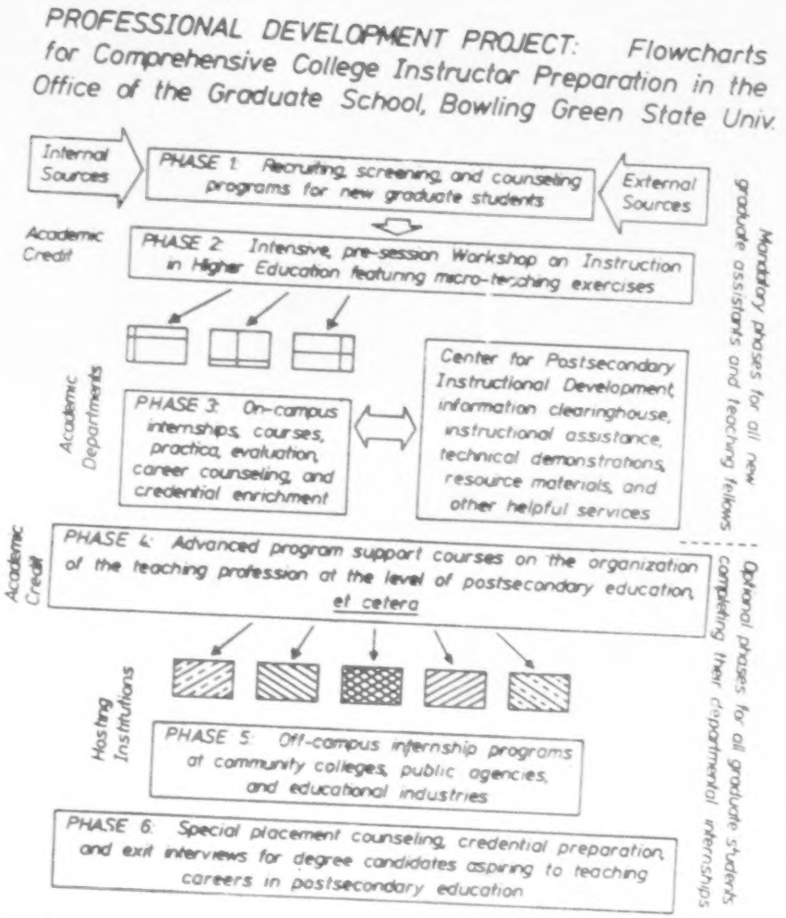
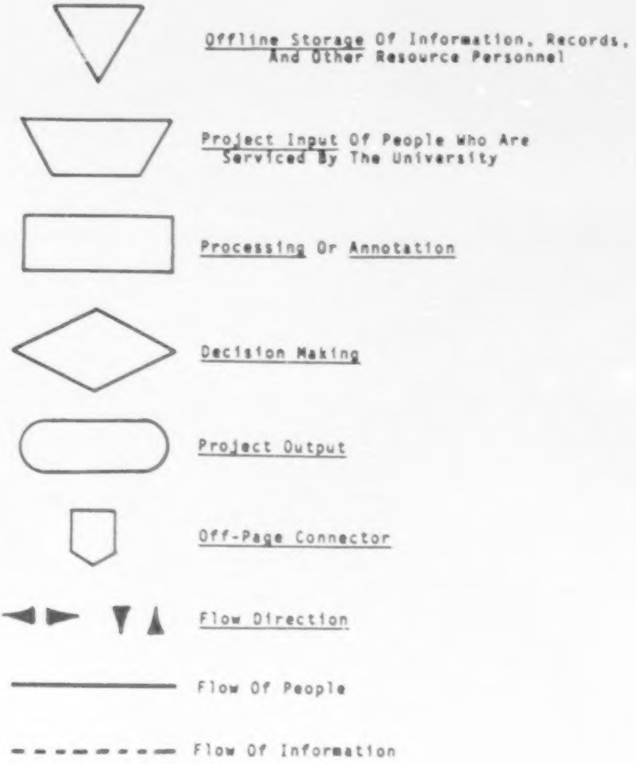

PROFESSIONAL DEVELOPMENT PROJECT: Flowcharts for Comprehensive College Instructor Preparation in the Office of the Graduate School, Bowling Green State Univ.
Internal Sources
PHASE 1: Recruiting, screening, and counseling programs for new graduate students
External Sources
Academic Credit
PHASE 2: Intensive, pre-session Workshop on Instruction in Higher Education featuring micro-teaching exercises
Academic Departments
PHASE 3: On-campus internships, courses, practica, evaluation, career counseling, and credential enrichment
Center for Postsecondary Instructional Development, information clearinghouse, instructional assistance, technical demonstrations, resource materials, and other helpful services
Mandatory phases for all new graduate assistants and teaching fellows
Academic Credit
PHASE 4: Advanced program support courses on the organization of the teaching profession at the level of postsecondary education, et cetera
Hosting Institutions
PHASE 5: Off-campus internship programs at community colleges, public agencies, and educational industries
PHASE 6: Special placement counseling, credential preparation, and exit interviews for degree candidates aspiring to teaching careers in postsecondary education
Optional phases for all graduate students completing their departmental internships

Figure 1. Phases of the Professional Development Project. The modular character of each Phase is illustrated. Phases 1, 2, and 3 are mandatory for all teaching assistants. Phases 4, 5, and 6 are designed for doctoral level students and for students in the degree program Master of Arts in Teaching. The subdivisions within the smallest rectangles represent the varied discipline-bound styles of teacher training (Phase 3) and the varied nature of off-campus teaching internships (Phase 5).

The phases of the project are distinctive because they are comprehensive in two dimensions: first, they assure that every graduate degree program will be undertaken with a view to make the teaching experiences of graduate assistants and teaching fellows as visible as possible on the official transcripts and in their credential files; and second, they help to guide participating graduate students toward a career in postsecondary education from the time of matriculation until the time of placement. A flow chart (Figures 2a and 2b) illustrates the relationships between successive phases in the professional preparation of college instructors and possible student behaviors.

The Professional Development Project at Bowling Green State University is currently receiving support from the Fund for the Improvement of Postsecondary Education in the United States Office of Education. A three-year research and demonstration grant in the amount of $114,500 was received in July, 1973, under the title of "A Competency Based Project for Vocational Preparation within Graduate Education." The sum of $53,427 is being used for the first year of operation. Although Bowling Green State University is fortunate in being supported by the Fund, since only 89 proposals out of 1358 applications were approved, the rich opportunities in this grant for acquiring knowledge and experience is a challenge for almost


Offline Storage Of Information, Records, And Other Resource Personnel
Project Input Of People Who Are Serviced By The University
Processing Or Annotation
Decision Making
Project Output
Off-Page Connector
Flow Direction
Flow Of People
Flow Of Information

Figures 2a and 2b. Flow chart describing the movement of graduate students through the Professional Development Project. Symbols identify functions that occur in each Phase.

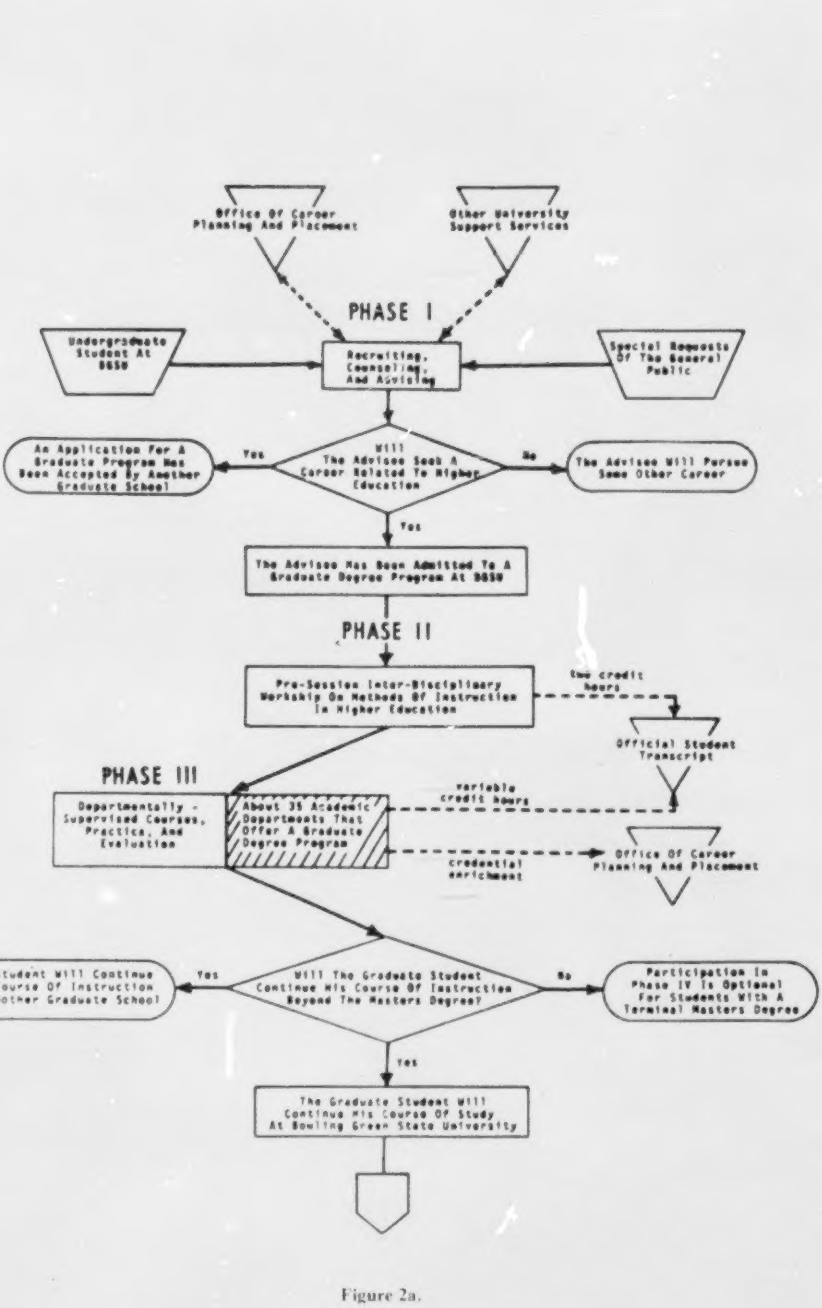

Office Of Career Planning And Placement
Other University Support Services
PHASE I
Undergraduate Student At BGSU
Recruiting, Counseling, And Advising
Special Requests Of The General Public
An Application For A Graduate Program Has Been Accepted By Another Graduate School
Yes
Will The Advisee Seek A Career Related To Higher Education
No
The Advisee Will Pursue Some Other Career
Yes
The Advisee Has Been Admitted To A Graduate Degree Program At BGSU
PHASE II
Pre-Session Inter-Disciplinary Workship On Methods Of Instruction In Higher Education
two credit hours
Official Student Transcript
PHASE III
Departmentally - Supervised Courses, Practica, And Evaluation
About 35 Academic Departments That Offer A Graduate Degree Program
variable credit hours
credential enrichment
Office Of Career Planning And Placement
The Student Will Continue His Course Of Instruction At Another Graduate School
Yes
Will The Graduate Student Continue His Course Of Instruction Beyond The Masters Degree?
No
Participation In Phase IV Is Optional For Students With A Terminal Masters Degree
Yes
The Graduate Student Will Continue His Course Of Study At Bowling Green State University

Figure 2a.

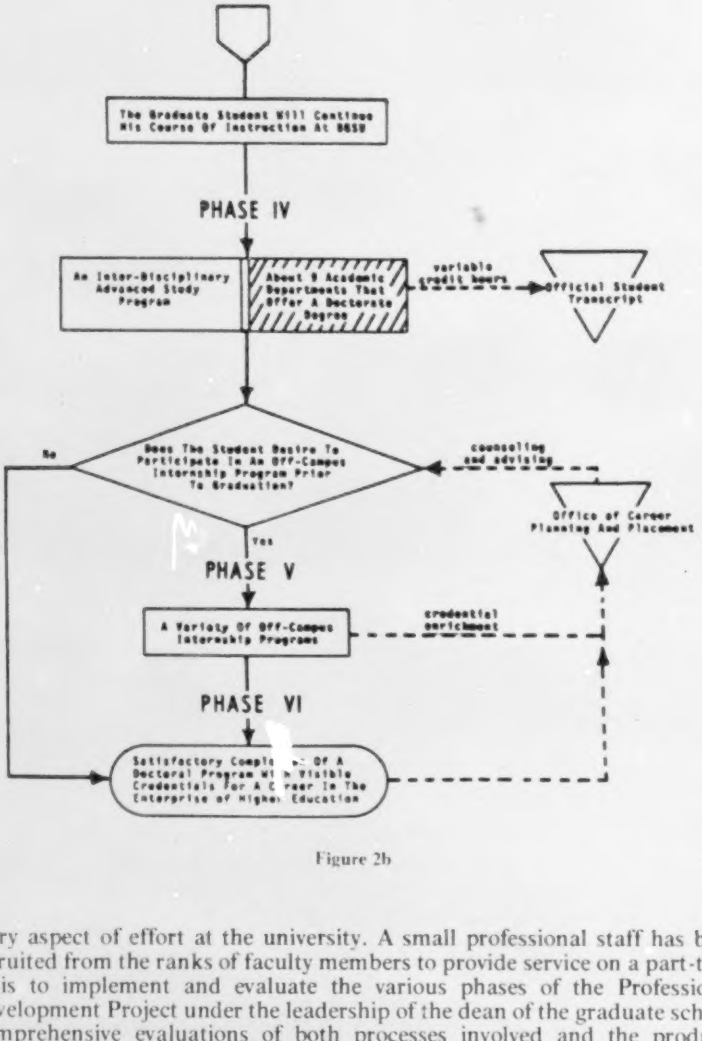

The Graduate Student Will Continue His Course Of Instruction At BGSU
PHASE IV
An Inter-Disciplinary Advanced Study Program
About 9 Academic Departments That Offer A Doctorate Degree
variable credit hours
Official Student Transcript
Does The Student Desire To Participate In An Off-Campus Internship Program Prior To Graduation?
No
Yes
counseling and advising
Office of Career Planning And Placement
PHASE V
A Variety Of Off-Campus Internship Programs
credential enrichment
PHASE VI
Satisfactory Completion Of A Doctoral Program With Visible Credentials For A Career In The Enterprise of Higher Education

Figure 2b

every aspect of effort at the university. A small professional staff has been recruited from the ranks of faculty members to provide service on a part-time basis to implement and evaluate the various phases of the Professional Development Project under the leadership of the dean of the graduate school. Comprehensive evaluations of both processes involved and the products (teachers) produced are intrinsic components of the project.

The Project is being implemented on the assumption that effective teaching, like any other skill, must be developed through deliberate study and practice. For example, the capacity to grasp the significant, to synthesize elements into a meaningful whole after having analyzed the details, and the ability to communicate these insights are achievements that can be gained by persistent effort. Although it may not be possible to teach aspiring teachers to be charismatic, it is possible to instill the value that good teachers are those who can creatively respond in an effective way to a variety of instructional situations. The project will not only help prepare graduate students for successful and diversified careers in the vast enterprise of post-secondary education, it will also help them become more effective in their teaching assignments before they leave the campus.

In order to safeguard individual and institutional interests, a representative body of faculty and staff members has been formed into an Advisory Board to the project director. This Board is authorized to monitor the impact of the project upon the campus community and to review relative priorities in the arena of campus activities. The following objectives will be diligently pursued during the initial three years of the project's operation:

a. assist academic departments to promote teaching effectiveness by developing courses, practica, and evaluation programs for prospective college teachers that are targeted to their specific disciplines. The aim is to involve the departments in the process of college teacher training and to involve graduate students in the evaluation process. Consequently, the proposed project does not consist of a new degree program nor of an area of concentration in the College of Education.

b. coordinate operational phases of the entire project so as to bring recognition to Bowling Green State University as an institution that is concerned with quality in higher education and the improvement of instruction on a campus-wide basis. The explicit preparation of the graduate assistant for the role of teacher will result in a more professional orientation toward teaching among graduate assistants and teaching fellows. In addition, the project will facilitate our efforts to recruit and prepare high quality graduate students.

c. encourage the development of professional student-teacher relationships by exposing participating graduate students to various educational philosophies and teaching methods at the college level. Each academic department has its unique role and responsibility to join in effective teamwork with other disciplines to broaden the professional philosophy of the prospective college teacher before it becomes crystallized. The aim is to provide each graduate student with certain interdisciplinary experiences and a pluralism of role models.

d. inject more realism into recruiting practices, career counseling, and placement efforts that are pertinent to higher education and that will enhance the employment prospects of students in graduate programs. A particular effort will be made to expose a broader spectrum of the undergraduate college population to college teaching as a career. Minority group members, women, and military veterans will be the object of particular attention in the recruiting of students into the project. Moreover, the project will emphasize the necessity of recognizing diverse cultural backgrounds within undergraduate instruction.

e. establish stronger inter-institutional relations between our university and other colleges in the region, as well as with other educational or service agencies in business and government, where field experiences in the form of internships are feasible. As part of this project, we shall attempt to broaden the number of possible institutional settings for field experience as an integral part of graduate degree programs. The internship program will complement similar field experiences that are presently being offered to graduate students in clinical psychology, speech pathology and audiology, and educational administration.

f. provide a model for developing college teacher preparation programs in other institutions sharing the conviction that such training is vital to the professional competency of postsecondary teachers. For example, the intensive workshop on Instruction in Higher Education that is offered to all new graduate assistants prior to the fall quarter can be debugged, packaged and exported to technical institutes, two-year colleges, and other educational agencies in the form of a university extension service. The overall structure and coordination of other phases in the project may also be exportable as an extension service.

The Professional Development Project identifies a pervasive emphasis upon quality teaching at Bowling Green State University. This focus on excellence in instruction permeates every component of the university, and places the value of first-rate teaching before graduate students from the very beginning of their graduate studies. It is emphasized, however, that the purpose of the project is *not* to increase the number of college level teachers, but rather to provide a more systematic preparation for future careers.

Cognitive Aspects of College Teaching

Mary Ann Carroll

The Disturbing Situation: In 1844 Emerson said, "We are students of words; we are shut up in schools and colleges and recitation rooms for ten or fifteen years and come out at last with a bag of wind, a memory of words, and do not know a thing."

Several years ago in an essay on higher education, John Wright, a former student at Indiana State and presently a college professor of English, cited Emerson's statement and added, "Next semester I will be a senior; my index is 3.73 — and I feel as though I do not know a thing. In almost every class I attend I get nothing but information. It has been written that great minds deal with ideas yet my college classes seem like petrified forests. The ideas are there but they are viewed only as objects of curiosity. Too long ago they were buried between the tons of information that have built up through the centuries. [What is left is] . . . the petrified forest of education."

In the March 1973 issue of *Intellect* Leon J. Lefkowitz in an article entitled, "Our Newly Developing Wastelands: The American Colleges" cited results of random interviews with 300 students from over 50 leading colleges and universities in the eastern half of the United States. Among the questions asked in these interviews was, "How would you evaluate the quality of your education at your school — good, fair, bad, not worth the effort?" Over two-thirds of the students interviewed stated that college education or what was presented to them was not worth the effort.

Dr. James C. Tyson, Professor of Education and Educational Psychology, also of Indiana State, and I are deeply disturbed by what we consider to be a tragic situation in higher education. We are convinced that many college graduates really *don't* know a thing; we are convinced that many college classes *are* like petrified forests; we are convinced that much of what is being presented to college students *isn't* worth their time and effort; and we are convinced that this lack of learning, this lack of something of value and this lack of life in the classroom are, to a large degree, the result of ineffective teaching. Since this is an unacceptable state of affairs for us, Dr. Tyson and I are committed to the study of teaching.

Certainly Dr. Tyson and I are not alone in our concern with teaching. The fact that this topic is on the CGS program is proof of an interest in improving college teaching as is your presence at this session. The fact that in 1964 the Hazen Foundation funded a three year study by the Committee on Undergraduate Teaching with C. Easton Rothwell as chairman indicates a similar concern. The fact that in 1969 the Carnegie Corporation funded a two year project designed to improve college teaching under the direction of the AAUP and the Association of American Colleges also demonstrates that a number of people are convinced that college teaching is not as effective as it should and could be.

Thus, the concern Dr. Tyson and I feel about college teaching is shared by many. Our approach to the problem, however, is not a common one.

Basic to the thinking we are doing about teaching are certain assumptions.

First, we assume that *while knowledge of a field is prerequisite to teaching it, such knowledge does not give direction to teaching.* In other words, I certainly cannot teach mathematics without understanding it myself but my understanding of mathematics sheds no light on how I can help someone else understand it. If this assumption was not valid, our best scholars would also be our best teachers.

Second, we assume that *one does not learn to teach effectively simply by teaching.* True, one can learn how much material it takes to "fill" an hour with a little practice, but practice *per se* does not make one an increasingly effective teacher. If this assumption was not valid our teachers who have taught for the longest periods of time would also be our most effective teachers.

Third, we assume that *the ability to teach effectively is not an innate quality, rather it is something that can be learned.* Without doubt an individual's innate warmth, zest and enthusiasm can enhance his teaching effectiveness but the ability to help another individual understand a subject is something that can be acquired. If this assumption was not valid, the Council of Graduate Schools would not have endorsed the Doctor of Arts Degree.

Fourth, we assume that *individuals can be taught to become effective teachers only if teaching is approached as a science — that is, as a discipline in and of itself with structure and paradigms.* If this assumption is not valid, one is forced to assume that effective teaching is the result of innate ability or practice or imitation or a favorable environment or a combination of such things as these. To date such assumptions — although widely held — have done little to eradicate ineffective teaching.

Finally, we assume that *schools of education* — and we both hold academic rank in such a school — *have not yet discovered the key components of effective teaching.* What is taught in such schools concerning curriculum construction, the history and philosophy of education, school administration, educational psychology, etc. are all worthwhile and important but we feel that much of the body of knowledge relating to effective teaching has eluded us and our peers. Teaching paradigms cannot be found in schools of education. If this assumption was not valid, the best teaching on your campus and mine would be done by those of us who teach in schools of education.

In addition to our assumptions, our approach to the problem of effective teaching has been determined by the *purpose* of teaching, as we see it. In establishing this goal we had to determine what we wanted students to learn and what we wanted them to be able to do with what they learned. We considered—do we want students to learn *facts* so they can *recite* them?; do we want students to learn "*points of view*" so they can *discuss* them?; or do we want students to learn *concepts* so they can *use* them to explain and hypothesize? Dr. Tyson and I have determined that the latter is the goal of teaching to which we shall devote our time.

Our study of teaching, therefore is focused on the problem — *What are the conceptual teaching-learning models basic to the transmission of concepts as tools?* In other words, what is the theoretical base that undergirds teaching students to use concepts for creative thought and action? It is the structure or the cognitive aspects of teaching that intrigue us and demand our attention. We are concerned with such things as: What is conceptualization? What are its subsets? What teacher actions facilitate the occurrence of each subset? What kinds of inferences must students make in acquiring various kinds of knowledge? What types of questions facilitate each inference process? What is involved in transforming conceptualization into action? As these and many other questions are answered by research, the cognitive aspects of teaching will be identified and teaching will have a rational base. Without such a conceptual framework, teaching will remain a trial and error activity or a random experimentation process or simply imitation.

Perhaps at this point you are thinking — Well, good luck! Let us know when the models are ready! Such a response on your part is not acceptable to me. The problem of college teaching is not just Dr. Tyson's and mine. In fact, it is more yours than it is ours! As Ann Heiss stated ". . . the graduate school should reaffirm its responsibility as the teacher of teachers by offering carefully designed programs of teacher preparation . . ." Will you accept the fact that the graduate school is responsible for the quality of college teaching? If so, I have a proposal for your consideration.

Dr. Tyson and I are keenly aware of the enormity of the task in which we are involved. We are convinced we are on the "right track" but we see the need for a broader commitment of talent and energy to the study of instruction. If a concerted effort were made — a Manhattan project if you will — the cognitive aspects of college teaching could be identified within a reasonable period of time. Without such an effort, the conceptual framework of teaching may remain fuzzy or little known for many years.

With the backing of the Council of Graduate Schools, I believe it would be possible to obtain the funding necessary for a group of scholars from a variety of disciplines to engage in the study of teaching. Such an endeavor could succeed where other funded scholarly studies have failed if all participants:

(1) are vitally interested in effective teaching
(2) see the need for conceptual teaching-learning models
(3) approach the study with the same basic assumptions
(4) share a common goal of teaching.

If the participants lack any of these, little will be accomplished. I am currently serving on a national commission dealing with the improvement of teaching. Although each member of the commission is deeply interested in more effective teaching, we are going nowhere primarily because there is disagreement as to the need for conceptual models, we hold few if any assumptions in common, and each of us is concerned with a different instructional outcome. Interest, talent, time and money are not enough for a successful study of teaching. Commitment to the development of teaching paradigms, common assumptions, and common goals must also be present if progress is to be made. I strongly urge CGS to take immediate action to instigate a nation-wide study of teaching within the framework described.

I can see no component of higher education that is more deserving of our time and attention than is teaching. Bright students have and always will learn regardless of the kind of teaching they receive. How much more might they learn if they were exposed to effective teaching? It appears from the increase in our open admission policies that college populations will contain proportionately fewer "bright" students in the years that lie ahead. Learning will, therefore, increasingly be dependent upon the effectiveness of the teaching.

Were teaching to become more effective, our enrollment problems might well be less critical; were it to be more effective, the public's dissatisfaction with us as reflected by its dollar restrictions might well be less intense; were it to become more effective, the morale of our students and faculty might well be enhanced.

The fact that college teaching is often ineffective can no longer be acknowledged, discussed, lamented and forgotten. The conceptual models of effective teaching must be found.

The Preparation of Graduate Students for College Teaching*

Frank J. Vattano

Certain recent developments in higher education have led to a focus on a neglected area of our profession, namely the preparation of scholars as teachers.[1] The last four years have been witness to particular events which reemphasize the problem expressed so succinctly by B.F. Skinner in 1956 when he wrote:

> It has been said that college teaching is the only profession for which there is no professional training, and it is commonly argued that this is because our graduate schools train scholars and scientists rather than teachers. We are more concerned with the discovery of knowledge than with its dissemination.[2]

It is true that historically most college teachers have acquired their teaching style mostly by incidental involvement rather than through organized programs designed to assist the future teacher to develop behaviors associated with effective teaching. Shortcomings in college teacher preparation have been cited by several investigators such as Hanzeli,[3] Costin,[4] Morrow,[5] Berelson,[6] Heiss,[7] Eble,[8] to name a few.

Most professions in our society have rather stringent behavioral criteria as prerequisites for the licensing of its practitioners. The typical young college teacher enters the teaching profession with little or no formal preparation; at best he or she has some opinions about how not to teach, ideas learned through personal experience as the recipient of a variety of teaching approaches that were directed towards their own learning. In the absence of any formalized exposure to college teaching, the young graduate student or Ph.D. with newly assigned teaching duties approaches the task by trying to model the "best" behaviors of his own teachers and forgetting the behaviors of the "worst" in like manner.

---

*The authors of this paper are Frank J. Vattano and Robert W. Titley, Department of Psychology, Colorado State University.

Characteristics of "good" or "bad" teaching are often attributed to some unquantifiable "individual differences" notion of behavior. Apparently, the concept of effective teaching and its behavioral referents are so infinitely elusive that our graduate schools seem unable to agree on some minimum standard of knowledge and performance regarding teaching practices. Too few graduate schools have formal programs designed to prepare the potential college teacher with the most basic understanding of what is necessary to be successful as a college or university teacher.

There are many alternatives available to us as potential solutions to the problem. For any of these to be effective, however, requires a degree of commitment on the part of those who are charged with the responsibility of producing future faculty for our colleges and universities. I would like to think that a body such as the Council of Graduate Schools (CGS) would consider adopting a resolution carrying specific recommendations outlining minimum criteria to be applied to graduate students who are destined to become college or university teachers. This resolution would be offered to all graduate schools for their consideration. Basically the resolution should call for a series of experiences to be made available to all graduate students planning on entering college teaching. These experiences would go beyond the normal supervised or unsupervised teaching assignments that are usually given to graduate teaching assistants. Allow me to propose an outline for this additional set of experiences:

1. *A Literature Survey*. I would suggest that at the very minimum a future college teacher should be comfortably familiar, and have some experience with a body of knowledge which exists concerning teaching. . . particularly research on teaching and learning.
2. *Parameters of Effective Teaching*. There appears to be a certain level of agreement on at least *some* of the behavioral attributes of what effective teaching is, and believe it or not, most of these can be learned. There are a number of excellent studies which relate to this topic; e.g., R.C. Wilson[9] and W.W. Ronan.[10]
3. *Formulating Instructional Objectives* is another topic which should form part of the basic outline. Mager's[11] well known text is an excellent beginning; the paper by Alexander and Abedor[12] of Michigan State is also a useful resource on this topic. A person planning on a career as a college or university teacher who is not at least generally familiar with the role of instructional objectives would be analagous to a contractor constructing a house without knowledge of blueprints—not very efficient, because he does not know where he is going.
4. *Applied Psychological Principles*. An essential element to our outline involves a consideration of some psychological principles as they apply to teaching and learning. Such things as reinforcement, stimulus variability, meaningfulness, learning as an active process, and anxiety reduction are but a few of the empirically established principles which have direct application in teaching and learning environments. McKeachie's[13] book on *Teaching Tips* is a helpful source here.
5. *Micro-teaching*. The micro-teaching method employing video tape is

another element which should be part of the outline. The opportunity to critically self evaluate teaching should be a part of any program of teacher preparation. This analysis should be accomplished under direction of skillful, experienced teachers. Allen and Ryan's[14] text is an invaluable reference on this topic.

6. *Educational Media.* The proper application of media in teaching is still another important consideration. Hardware development is progressing at an unprecedented rate but models for its application are hard to come by. Nevertheless, it is only through familiarization with what is available that the future college teacher will be able to apply media intelligently. Well utilized media can enhance student learning and contribute to the excitement of converting an idea into a concept with vitality and meaning to both the student and teacher.

Certainly our outline should include some consideration of alternative approaches to teaching and learning. Let's call number seven: *Non-Traditional Study.* The current *zeitgeist* is flourishing with models of non-traditional study which include numerous alternatives to the traditional classroom. I do not mean to suggest that all future teachers jump on the bandwagon of "change for the sake of change" and immediately apply non-traditional models of teaching without some discretion. But careful consideration of some of the non-traditional approaches to teaching, as described in the five articles of the Fall, 1972 *College Board Review*[15] is certainly encouraged. Additionally, Ohmer Milton's[16] *Alternatives to the Traditional* and *Diversity by Design*[17] from the Commission on Non-Traditional Study are also worth reading. Innovative application of some of these ideas into our already existing curricula could have far reaching implications for the future.

Two other topics of our outline are concerned with *Evaluation of Student Achievement* and with its logical counterpart, *Evaluating Teaching Effectiveness* (professor evaluation). The first of these topics is perhaps a little less controversial. Assessing student progress seems to be here to stay and although we have various grading scales available from pass-fail to B−, C+, concepts of test validity and reliability and their relationship to instructional objectives are essential to most learning environments. Bloom's[18] book on *Taxonomy of Educational Objectives* and Millman's[19] work on test-wiseness are must reading for every college teacher.

The more controversial issue of *professor evaluation* is growing in its importance. Accountability, like grading, will be around for awhile and it therefore behooves the future college or university teacher to be familiar with the issue based upon the literature on the topic rather than the more often evidenced emotional reaction to the question. Eble's[20] monograph, *Recognition and Evaluation of College Teaching,* is one of the finest sources on the topic, along with articles by Hildebrand[21] and Costin, *et al.*[22] Although we all have our own biases on this issue, there is no substitute for some knowledge of the literature on the matter.

To complete our outline, let's put the following topics as number ten: *Career Development, How to Search for a Job* (getting to be a touchy and depressing topic these days, especially for young Ph.D.'s), *Interviewing for a Job, Academic Freedom and Tenure,* and *Becoming a Valued Member of a Department* (institutional loyalty).

In my view this outline provides a basis on which to build the many specialized skills necessary to becoming a successful teaching professor.

But you ask how long will all this take? It can be accomplished (at least introduced) in a single term in approximately 30 hours.

My colleague, Dr. Robert W. Titley, co-author of this paper, and I have conducted such a program in the form of a seminar for the past two years at Colorado State. The format selected for the seminar consists of ten 3-hour sessions. The class is limited to 20 students with no more than two from any one discipline. Its major unique characteristic is that it is interdisciplinary — we believe there are important dimensions of college teaching that can be taught which are independent of discipline content. The results of student evaluations support our contention that it is a needed and valuable experience for traduate students as they prepare for their eventual academic careers.

This seminar is only one possible route to the general objective of preparing graduate students for what may lie ahead. With so many of our Ph.D. recipients entering positions requiring teaching performance, it seems justifiable to argue that training for teaching which goes well beyond the typical and often nominal teaching assistantship supervision, should be a part of all graduate curricula in our colleges and universities.

I would like to suggest that the appropriate bodies within the Council of Graduate Schools go beyond their endorsement of the Doctor of Arts Degree and lend their support and influence to promote programs for the preparation of college professors (as teachers). It might be a concrete step we can take in improving the quality of teaching and learning in our colleges and universities.

BIBLIOGRAPHY

[1] K.E. Eble, *Professors as Teachers* (San Francisco: Jossey-Bass, Inc., 1972).

[2] B.F. Skinner, "A Case History in Scientific Method," *American Psychologist*, 1956, *11*, 221-223.

[3] V.E. Hanzeli, "Internship for Teaching Assistants," *Improving College and University Teaching*, XVI (Summer, 1968), pp. 110-112.

[4] F. Costin, "A Seminar in the Teaching of Psychology," *Improving College and University Teaching*, XVI (Winter, 1968), pp. 48-49.

[5] R. Morrow, "Preparation and Internship of College Teachers," *Current Issues in Higher Education*, (1964), p. 120.

[6] B. Berelson, *Graduate Education in the United States* (New York: McGraw-Hill Book Co., Inc., 1960).

[7] A. Heiss, *Challenges to Graduate Schools* (San Francisco: Jossey-Bass, Inc., 1970).

[8] K.E. Eble, *Career Development of the Effective College Teacher* (Washington, D.C.: American Association of University Professors, 1971), pp. 14-35.

[9] R. Wilson, "Teaching Effectiveness: Its Measurement," *Engineering Education*, Mar., 1972, pp. 550-552.

[10] W.W. Ronan, "Evaluating College Classroom Effectiveness," PREP Report No. 34, Office of Education (Washington, D.C., 1972).

[11] R.F. Mager, *Preparing Instructional Objectives* (Belmont, California: Fearon Publishers, 1962).

[12] L.T. Alexander and A.J. Abedor: "Are Our Instructional Objectives Stated Clearly?" *E.D.P. Comment*, No. 8 (January, 1971).

[13] W.J. McKeachie, *Teaching Tips: A Guidebook for the Beginning College Teacher* (Lexington, Massachusetts: D.C. Heath and Co., sixth edition, 1969).

[14] D. Allen and K. Ryan, *Micro Teaching* (Reading, Massachusetts: Addison-Wesley, 1969).

[15] College Entrance Examination Board, "Five Articles on "Non-Traditional Educational Concepts, *College Board Review*, No. 85, Fall, 1972.

[16] O. Milton, *Alternatives to the Traditional* (San Francisco, California: Jossey-Bass, Inc., 1972).

[17] Commission on Non-Traditional Study, *Diversity by Design* (San Francisco, California: Jossey-Bass, 1973).

[18] B.S. Bloom, *Taxonomy of Educational Objectives: Cognitive Domain* (New York: David McKay, 1956).

[19] J. Millman, C. Bishop, and R. Ebel, "An Analysis of Test-Wiseness," *Educational and Psychological Measurement*, Vol. XXV, No. 3, 1965, pp. 707-725.

[20] K.E. Eble, *Recognition and Evaluation of College Teaching* (Washington, D.C.: AAUP, 1971).

[21] Milton Hildebrand, "How to Recommend Promotion for a Mediocre Teacher Without Actually Lying," *Experiment and Innovation*, University of California, 1971.

[22] F. Costin, *et al.*, "Student Ratings of College Teaching: Reliability, Validity and Usefulness," *Review of Educational Research*, Vol. 41, No. 5, pp. 511-535.

FINANCING GRADUATE EDUCATION

Moderator: Donald J. White, *Boston College*
Dwight Horch, *Educational Testing Service*
Samuel M. Nabrit, *Southern Fellowships Fund*
Arliss L. Roaden, *The Ohio State University*

Donald White

Kathryn McCarthy is alive and well in Medford, Massachusetts, and working very diligently. Unfortunately, she could not be here today so I am privileged to be her substitute. My name is Don White and I am the graduate dean at Boston College.

The speakers will each address you for about ten minutes and then the floor will be open for discussion. We will begin with Dwight Horch who is Executive Associate at the Educational Testing Service. He is here to speak about "GAPSFAS: Its Origin, Functions, and Resources." Among other things we have discovered that the latter-day substitute for the stones that were put in Demosthenes' mouth or at least a student whom he would have become a great speaker is this GAPSFAS that no one can pronounce. However, our speaker can do even better than that.

GAPSFAS

Dwight H. Horch

Thank you. About a month ago I received an invitation from Charles Lester to describe the origin, function, and usage of GAPSFAS in ten minutes. For those of you who are not familiar with GAPSFAS, it is an unwieldy acronym. Contrary to popular opinion, the acronym does *not* stand for Get a Portable Scholarship or Fellowship and Study. GAPSFAS stands for the Graduate and Professional School Financial Aid Service, for which I am the program director at Educational Testing Service.

GAPSFAS grew out of an interest among certain graduate and professional schools, who desired a centralized financial aid application and need analysis service that was responsive to the varying roles and traditions of the graduate and professional school community. Because of this interest, Educational Testing Service arranged a conference in June, 1971 for representatives from five associations: The Graduate Record Examinations Board, the Association of American Medical Colleges, the Graduate Business Admissions Council, the Law School Admissions Council, and the College Scholarship Service Council.

Out of the June, 1971 conference arose agreement about the need for a common financial aid application for graduate and professional students and for a need analysis service that was sensitive to the varying traditions and needs of graduate and professional schools.

Throughout the fall of 1971 and during the winter of 1972, ETS staff worked with representatives of the five associations to design a common financial aid application and to design a centralized needs assessment service. The immediate objective of the June, 1971 conference was achieved. The GAPSFAS program became operational in the late fall of 1972 and has just completed its first operational year.

Let me make just a few remarks about GAPSFAS governance. I mentioned earlier that five associations are involved in GAPSFAS (GREB, LSAC, GBAC, AAMC, and CSS). Each of these associations appoints three members to serve on the Graduate and Professional Financial Aid Council. Thus, the Council consists of fifteen representatives. Incidentally, the GREB representatives on the Council are May Brodbeck, University of Minnesota, Richard Kraus, Harvard University, and Herb Weisinger, SUNY at Stony Brook.

Next I would like to comment briefly on the way the service operates.

Candidates obtain GAPSFAS applications from their undergraduate financial aid officer, or from the graduate and professional schools they wish to attend. Forms are also available at the initial fall administration of the Admissions Test for Graduate Study in Business (ATGSB), the Graduate Record Examinations (GRE), and the Law School Admission Test (LSAT).

Candidates may designate any number of institutions to receive reports. The applicant completes Part I of the form; the spouse or spouse-to-be completes Part II. Part III is optional and is completed by the applicant's parents only if one (or more) of the schools to which the candidate is applying requires it.

The GAPSFAS application is printed on two sides of a single 11" × 17" sheet and is modular in format. Financial and biographical information is collected in all three parts of the application on income sources, expenses, assets, and liabilities, employment, and tax dependents. In addition, the applicant and spouse are asked to provide educational and financial aid background information and the parents are asked to supply the amount they can be expected to contribute to the applicant and supplementary financial information if they own a business or farm.

Some graduate and professional school deans feel that the parents' financial strength should be considered in analyzing the graduate and professional candidate's needs; others feel that such information should not be considered.

GAPSFAS has been designed to meet the needs of both groups. Each school may elect to require parental analysis for all its aid applicants or for only those who are dependent (by federal financial aid program criteria) on their parents, or it may elect not to receive parental analysis for any of its aid applicants.

Thus, each institution that receives GAPSFAS reports may exercise policy control with respect to the requirement (and receipt) of parental analysis.

If the parents' section has been requested by a designated institution, but the applicant fails to have his or her parents complete and return it, the institution is sent a transcript copy and analysis of the applicant and spouse data immediately. GAPSFAS notifies the applicant that the parents' section is required and provides a copy for completion. After the service receives and processes the section, it sends revised analysis reports and transcript copies of the Parents' Questionnaire to the institution.

Within 12 to 15 days after receipt of applications, GAPSFAS sends to designated schools of each financial aid applicant a transcript copy of the application and a computer-produced report summarizing and analyzing the financial information. The copies are collated with the reports.

Schools that choose not to receive parents' information will receive a Summary of Applicant's Resources Report in which only the applicant's and spouse's information will be analyzed. Schools that wish to receive parents' data will be sent the Summary of Applicant's Resources Report and the Report of Estimated Parents' Contribution.

Last year some 57,000 students submitted GAPSFAS applications and approximately 250 graduate and professional schools actively participated in the service. Of the 250 schools that participated in GAPSFAS, there were 109 graduate schools, 66 law schools, 37 medical schools, 8 theological schools and 8 dental schools. Interestingly enough, of the 109 participating graduate schools, 100 required parental information from some or all of their candidates. Apparently there are many graduate schools that, in the wake of declining support for graduate and professional students, are allocating some types of financial aid in part on the basis of parents' ability to contribute toward the costs of post-baccalaureate education.

National and Regional Programs for Minority Students

Samuel M. Nabrit

It is a pleasure for me to have the opportunity to speak for the Southern Fellowships consortium. The Southern Fellowships Fund is an operating agency of the Council of Southern Universities. It was organized in the fifties by those nine southern universities that at that time had earned a level of distinction in Ph.D. programs. They really came together to counsel with each other and to assist each other in further development and growth. In looking about the region they discovered that the southern region was somewhat behind other regions of the country in percentages of faculty with Ph.D. degrees. So they launched, with the aid of the General Education Board, a foundation to compensate for this deficit in degrees.

From 1954 until about 1964 they provided fellowship programs to aid and assist young persons from the region primarily to go to universities of their choice in order to complete their degree programs. The hope was that they would return to the region and take positions in these institutions. In 1964, the General Education Board's funds were exhausted. After a two-year hiatus the Council called together ten black colleges and out of their discussions it was agreed that inasmuch as the black colleges of the region were still deficient in the number of faculty persons with terminal degrees, they would seek foundation funds from other sources and attempt to make it possible for them to come on level also. As a result, the Danforth Foundation made a grant of some $5 million to the Council for this joint endeavor. Since that time grants have been made to faculty persons, white and black, who were interested in teaching careers in the black institutions.

Two years later, the Diuguid sisters passed away and left a legacy to the Council for the purpose of providing opportunities for mature women who had an interruption in obtaining their career goals, and for women who might have already completed terminal professional degrees and who stopped to raise a family or gave up their practices entirely and then suddenly found because of new emergencies the necessity to return to their professional competence levels. For that reason, grants were made for individuals to be retreaded or to have individuals move on to terminal degrees or accomplish some creative endeavor because of their talent. So the Diuguid program is operated by the fund in order to make it possible for women to have one year of whatever kind of activity they assumed is necessary to bring them to a maximum level of achievement.

The next program that we have is the Whitney Young Foundation program which is designed to provide fellowships or internships for people who are social activists, that is, individuals who are change agents in society. These programs make it possible for persons who have been involved in something like the NAACP, the Urban League, or in social work, poverty law, model cities or educational administration to take a year in an internship, if that is the kind of special training that they feel is required. The program makes it possible for an individual striving to do this to take a formal year of education to achieve the level of training and competence necessary for a new career. These grants average about $10,000 and are designed for those individuals who might be affirmative action officers. This year we gave a grant to an individual who wished to look at the District of Columbia as a journalistic student in order to study equal access to the news media. So, there are a wide variety of activities possible under the banner of this type of grant.

The largest program that we have is the National Fellowship Program for Black Americans. This program makes possible graduate fellowships for 250 students each year. Funds are set aside for the 250 students to have at least four years of graduate study. If a good case is made a fifth year of study is possible. These individuals may apply in any of the traditional graduate fields leading to the Ph.D. with the exception that in most fields where the first postbaccalaureate degree is usually the degree for job entry we require that the first postbaccalaureate degree be attained before the person seeks a grant from us. Our goal here is primarily to see that the person moves on to the Ph.D. and in turn will provide a much larger pool for ultimate teaching in various types of educational institutions.

In addition to the one for Black Americans the Ford Foundation operates two minority programs, one for Indians and another for Latin Americans. These programs are exact parallels of the program for Black Americans except that Ford administers these two programs directly.

There is one other program available under the Woodrow Wilson Foundation which is the Martin Luther King program. This program is designed to make possible entrance at any level at which the minority person left off because he had become a veteran of the Vietnam conflict. Upon return, grants are available to admit his entry, or her entry, as the cast might be, into an academic institution to continue his educational endeavors. These grants can be used in conjunction with grants from our program, together with other GI benefits thus allowing these persons to move on to levels that they seek.

As you recall, the EDPA program was phased out last July. This program was originally designed to make possible the further education and retraining of those professional people who were pushed out of southern institutions largely as a result of integration of institutions. As would occur in so many cases of this sort, these individuals were supported by the government at rather high stipends, almost a salary level, through two and a half to three years of graduate study. However the program terminated at the time they should be completing their dissertations. Thus, we found pressure put upon us at the last minute to salvage some of these people and make it possible for them to complete their terminal degrees and move back into some other level of higher education.

In general, then, these are the programs available through private sources for minority persons in the country with the exception that occasionally IBM grants are made to specific institutions for faculty development. Also, there are still a few grants under Title III, which can be made available to black institutions having consortia arrangements with other black institutions and major Ph.D.-granting institutions, or in collaboration among black institutions.

These are the programs now available to offset what President Fleming indicated yesterday morning — that the present federal programs would probably make it more difficult for low-income persons to move into graduate education.

Financial Support for Graduate Students

Arliss L. Roaden

I am pleased to participate as a panel member discussing matters attendant to financial support for graduate students. My role is to discuss the efforts of a major state university to muster resources in support of graduate students. Since this session was billed as a workshop, I have brought along for distribution several "working papers" to which I shall make periodic references.[1] Hopefully, they will be useful in my attempts to convey to you a profile of student support in one major public university.

Two years of historical data — 1970 and 1972 — are reported for purposes of comparison and some indication of trends. There are two major categories of support — graduate student employment through graduate associateships, and fellowships and traineeships. One category requires service from graduate students; the other does not. For the major state university included in this report, the graduate student enrollment was 7,784 in 1970 and 7,840 in 1972. In 1970, 3,635 students received some level of financial support (47 percent), and in 1972, 3,693 students received support (47 percent).

Although the proportion of students supported was the same for each of the two years, the dollar support increased by $3 million, from $17.5 million to $20.6 million. Most of the increase represents adjustments in graduate associate stipends and in tuition and fees. Please note that while overall increases were taking place, there was a drop of 50 percent (from 402 to 202) in the number of fellows and trainees supported by non-university resources. The dollars from external resources for the support of fellows and trainees dropped similarly from a million dollars to one-half million dollars. The vast proportion of students receiving financial support are on graduate associateships. Thus, a major part of my discussion will be directed to that means of support. But first I shall review in a more detailed manner the fellowships and traineeships.

There were 340 university-financed fellows (at a cost of $832,000) in 1970; and 457 fellows (at a cost of $966,000) in 1972.[2] The non-university funded fellows and trainees are supported by all sources which the faculty and administration can identify (38 different external sources of support were identified in 1972). The drop of 50 percent in the number of externally funded fellows and trainees and in dollar support is dramatic; and the duress will be even more dramatic this year. The drop in federal support is severe and painful.

That is not all. Training grants are not included with the fellowships and traineeships; they do not fall neatly into the categories I have reviewed with you. In 1972, at the university reported here, there were 56 training grants with a value of $4 million which supported 515 students. These are graduate, professional and postdoctoral students. You are aware of what is happening to training grants; they are on a phase-out. Not only does the loss of training grants severely affect a university's budget for student support, but the data show that 51 premium faculty members will lose all or a portion of their support.

One other source of support is the G.I. Bill.[3] In 1970, 655 graduate students were supported by the Bill at the university reported here; and in 1972, 503 students received support from that source — another external source of graduate students' support which is on the decline.

Now, I shall discuss more extensively the graduate associateships, the primary source of support in a major university. I have distributed to you detailed reports for a major university for the years 1970 and 1972. The detailed data are more instructive than summary data which are useful but which sometimes camouflage important details.

There are three categories of graduate associateships — administrative, teaching and research: titles are used in relation to the nature of the assignment.

From 1970 to 1972, the graduate research associateships increased by 10 (895 to 905); graduate administrative associateships increased by 16 (186 to 202); and graduate teaching associateships increased by 115 (1,812 to 1,927). The differences are not sufficiently significant to show trends; however, the largest number of associates are in the humanities, mathematics and physical sciences, social and behavioral sciences, and education. These are colleges with large undergraduate enrollments. Declines in undergraduate enrollment in these colleges will decrease the institution's capacity to support graduate students on graduate teaching associateships. That problem, however, is only one of a series for the future.

Graduate students are aware increasingly that they are their own competition for regular faculty positions; and, during times of enrollment stability or decline, regular faculty members are becoming aware that graduate students are filling positions that could impede their own advancement and tenure.

Major universities absolutely must initiate and refine policies for graduate associates. I have distributed the efforts of one major university at policy making. I do not suggest that these are exemplary; they are just examples. You will note policies which pertain to the following topics:

1. ensuring that associates are first and foremost graduate students — that they are enrolled;
2. ensuring valid and valuable apprenticeship experiences;
3. ensuring equitable stipends;
4. ensuring compliance with affirmative action policies;

5. providing clarity on work loads, time commitments, and tenure of appointments;
6. clarifying expectations for reappointment;
7. providing for evaluation of performance;
8. identifying perquisites attendant to conducive working conditions of associateships;
9. codifying grievance procedures.

One final comment regarding stipends. Graduate associates should be paid what others with similar training, experience, and talents would be paid for carrying out similar responsibilities.

You will note in the handout that the referent for graduate associate stipends is instructor salaries. Thus, stipends vary in accordance with academic market conditions from discipline to discipline. Admittedly, a standard stipend scale would be easier to administer; however, it is patently unreasonable to pay the same stipend to persons who already hold the M.D., D.V.M., or M.B.A. degrees, for example, and who have years of clinical or executive experience as that which is paid to graduate students in a discipline such as history who have a fresh B.A. degree.

As you can see, student support in major universities is big business; the shifts in national priorities already have brought serious trouble, and more trouble is in the offing as we work at governing and administering both external and internal resources to support graduate students.

FOOTNOTES

[1] The "working papers" are: (1) "Overall Summary of Graduate Student Support," (2) "Summary of Fellowship and Trainee Support," (3) "Training Grants, 1972-73," (4) "Summary of Graduate Associate Support, 1970," (5) "Summary of Graduate Associate Support, 1972," (6) "Guidelines Related to Graduate Associates at The Ohio State University," and (7) "Graduate Teaching Associate Stipends in Relation to Beginning Instructor Salaries, 1972-73."

[2] The numbers do not represent full-time equivalents. Some held appointments for only one or two quarters during the year.

[3] At the 1973 meeting of the Association of Graduate Schools, Allan Cartter called attention to the prominence of this form of support.

Luncheon

Thursday, December 13, 1973, 12:30 p.m.

Chairman: Jacob E. Cobb, *Indiana State University*
Presentation of Gustave O. Arlt Award in the Humanities
Guest Speaker: Stephen K. Bailey, *Vice President*
American Council on Education

Luncheon

Jacob E. Cobb

One of the very pleasant opportunities which a person has, standing where I am on this particular occasion, is the presentation of the Gustave O. Arlt Award in the Humanities. This is the second year the award is being presented in honor of the first president of the Council of Graduate Schools in the United States, Dr. Gustave O. Arlt.

The committee for the selection of the individual to whom this award is being made is chaired by Dr. Herbert Weisinger, of SUNY at Stony Brook, and serving with him are Dr. Peter Gay of Yale University; Dr. Hans J. Hillerbrand of the City University of New York; and Dr. Lewis W. Spitz of Stanford University.

The award is presented this year to Dr. H.C. Erik Midelfort, who is an Associate Professor of History at the University of Virginia. Dr. Midelfort was born in Eau Claire, Wisconsin. Prior to his association with the University of Virginia, he taught at Stanford and Yale. He holds three degrees from Yale. He is a member of Phi Beta Kappa, has been an honorary Woodrow Wilson Fellow, a Fellow of the Foundation for Reformation Research, and has held a fellowship to Germany from the American Academic Exchange Service. He has several published articles and translations to his credit, in addition to his book which is the basis of the Gustave O. Arlt Award, *Witch Hunting in Southwestern Germany, 1562-1684, The Social and Intellectual Foundations*.

His major research interests include the history of insanity in early modern Europe and the history of free peasants in early modern Europe. His book has received excellent reviews in, for example, the *Times Literary Supplement* of September 7, 1973. Let me quote two sentences: "Erik Midelfort has written a balanced and perceptive book which should help to put the history and indeed the phenomenon of witchcraft in a clearer perspective. It is among the most notable of recent books on the subject." *Church and State*, Winter, 1973, states that: "H.C. Erik Midelfort has produced a superior piece of social history in his thoroughly researched and well written volume."

Dr. Midelfort, it is my very great pleasure to award to you the Gustave O. Arlt Award in the Humanities for 1973.

H. C. Erik Midelfort

I would like to believe that the award means one thing which is sometimes doubted, namely, that the dissertation in American graduate schools is still an extremely valuable discipline and a very important part of graduate education. It seems to me that I have heard in many academic places, attacks on the dissertation as being outmoded or overly academic. Apparently, academics are embarrassed about being academic.

It strikes me that my own dissertation which is essentially this book is at least one small piece of evidence that dissertations can still be a pleasure, especially if the candidate does not gain the impression from his work that he has fully understood his subject. Whatever our graduate programs can do to foster not only a pervasive type of skepticism but at least self-doubt will be all to the good.

I mentioned that dissertations can be fun. In this case, I chose a subject that caught my interest as an undergraduate. I wrote a paper in my junior year at Yale that simply escaped my understanding. Finally, I decided that a dissertation should be something that one is interested in. Even though there were no resident witches at Yale, as far as I knew, I was well advised to pursue a subject that caught and retained my interest from undergraduate years. As a result, with no extraordinary expert direction but plenty of good advice, I went into a dissertation which turned out to be a great deal of pleasure. Whatever we can do to preserve the two things which I have mentioned, the pleasure in dissertations as well as the discipline, will be good for American graduate education.

Finally, I am very grateful to be given this award by the Council of Graduate Schools.

Gustave O. Arlt

Dr. Midelfort, it is a great pleasure and honor for me to congratulate you. It is an additional pleasure for me to tell this audience something which they do not know. Dr. Midelfort's subject of research is exactly the same that I had in my first year out of graduate school. As a matter of fact, the first major book which I published in 1934 deals in part with precisely what he has written about except that his work is in greater detail and much better.

I have just a few words to say to the Council. It is for me a sort of a culmination of my career in graduate education that the Council in its generosity saw fit to establish this award in my name. I hope it continues for many years. The Council has permitted me to choose year by year the exact field of the humanities. Last year, I chose the field of English. This year, I chose History. Next year, I would like to choose the field of Linguistics. Some people do not believe that this is a humanity but rather an exact science. However, I am still old fashioned enough to regard Linguistics as something which is a humane discipline and even though it has been corrupted by mathematical methods and things of that sort, to me it is still a humane discipline.

Jacob E. Cobb

As you know, it has become traditional at this particular session to have an outstanding person address us from some field of endeavor in the United States.

Today, in keeping with the tradition, I have the very great pleasure of presenting to you Dr. Stephen K. Bailey, who is Vice-President of the American Council on Education. He was formerly Chairman of the Policy Institute of the Syracuse University Research Corporation and Maxwell Professor of Political Science in the Maxwell School of Citizenship and Public Affairs at Syracuse University. From 1961 to 1969, he served as Dean of the Maxwell School. He also, at the same time, served as professor of educational administration in the School of Education at Syracuse University.

He received his bachelor of arts degree in economics at Hiram College in 1937. He was a Rhodes Scholar and received both the bachelor's and master's degrees from Oxford University. He also holds a master's and doctoral degree from Harvard University. Before joining the Maxwell School in 1959 as a professor of political science, Dr. Bailey served on the faculties of Hiram College, Wesleyan University, and Princeton University. At Princeton, he was a William Church Osborne Professor of Public Affairs and director of graduate programs in the Woodrow Wilson School of Public and International Affairs. He has also been a Fulbright Lecturer in American Government at Oxford University. In addition to his academic and professional activities, Dr. Bailey has been and is an active participant in public affairs. I will simply not go into detail with all of his accomplishments in this area except to say that he was at one time the elected mayor of Middletown, Connecticut.

He is the author of many books and articles on politics, government, and education, including the winner of the Woodrow Wilson Prize of the American Political Science Association in 1950 for his book *Congress Makes A Law*.

It is my very great honor to present to you, Dr. Stephen Kemp Bailey.

Reflections of a Graduate Dean

Stephen K. Bailey

That so many of you were actually able to get here must be a source of gratification to Boyd Page. If, because of the energy crisis, you cannot get home, I can only assure you that Williamsburg is a delightful place to spend the winter, and that the William and Mary Library is a delight!

I bring you greetings from Roger Heyns and from the American Council on Education generally. The plight of the graduate schools of this nation is a matter of deep and continuing concern to ACE. Much of our time has been spent and will continue to be spent on matters in which you are directly involved and concerned. We need your help in defining how we can be of increasing assistance to you. I think ACE's major function is in trying to assure that the various parts of postsecondary education do not fly away from each other in a mindless centrifuge. We have got to recognize the unifying threads of purpose that hold all education together: K-12, proprietary schools, community colleges, four-year colleges, graduate schools, extension divisions, universities. If we follow the path of political separation, if we let ourselves or others drive us into warring factions, a weary public and preoccupied legislatures will say "to hell with you."

If one of my roles in ACE is to love all parts of postsecondary education equally, I must confess that I feel particularly close to those in this room. I hope that others will understand.

From 1954 to 1969, with only a couple of years hiatus, I was responsible for graduate programs or schools — first at Princeton and then at Syracuse. Those fifteen years of my adult life were, from the vantage point of hindsight, a fairly normal admixture of pleasure and pain. I learned a good deal about my own weaknesses and strengths. I learned something, I think, about the inner logic of major universities. I suffered some loss of faith in the consistency of the rationality of persons devoted presumably to rational pursuits — including a loss of faith in my own capacity to stick to rational principles in non-rational situations. But I also came, at long last, to a bedrock appreciation for the contributions made by graduate educators, even by strident and contentious types, to the quality of intellectual discourse in our society, and for the importance of advanced intellectual pursuits to human growth and civility generally.

These were not easy lessons for me to learn. I have always found the psychic violence of much faculty interaction alternately tedious and painful. The endless committee meetings of academia, in which the trivia of the agenda and the length of meetings are positively correlated at about .9, were always for me a terrible hair shirt. I long ago concluded that sensible people indulged in such attenuated nit-picking sessions only because the perceived alternative of grading papers or doing one's own research were pursuits even more disquieting to the psyche. And I must confess that the baroque elaborateness of some academic politics has never ceased to astound me. I once asked an esteemed colleague at Princeton why the internecine warfare was so grotesque in its intensity. He replied with enigmatic, Wildean wisdom, "Because the stakes are so inconsequential."

It is difficult to determine how many of the disutilities of academic administration of the kind just noted are in fact universals — part of the human condition, part of all human interaction in large scale organizations, to say nothing of small towns. I have worked in other contexts — notably in politics and in large governmental bureaucracies. I have also worked in other academic settings at other levels. It may simply have been the distance from my culturally programmed expectations, or the luck of the draw, but I think that I found a quantitative difference in the decibels of dissonance in graduate schools, *vis à vis* those I have experienced in other settings. If my experience can in fact be generalized, I like to believe that my Princeton friend was wrong, that the graduate cacophony is substantial at least in part because the pursuit of truth is of necessity a noisy and discomforting dialectic: the mother's cry and the baby's squall present in the perpetual births of the mind.

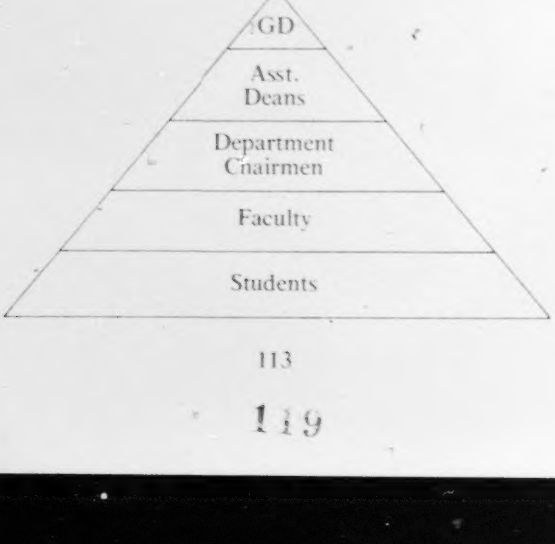
I start on this partially lugubrious note, not to dwell on the unpleasant, but to suggest that those of you who are constantly quieting tempers and resolving conflicts may be the true midwives of the future, and must expect (even at times welcome) the anguish of labor pains and delivery. For those of you who indulge the wish that enduring peace and harmony is just around the corner in your particular graduate enterprise, I would remind you of the sobering definition of middle age as the time in your life when you are sure you will feel better in a couple of weeks.

If noise and pain were all that is involved in administering graduate schools, I should not have spent fifteen years of my life in the trade, and most of you would not be here today. The satisfactions are substantial. Making things happen in graduate schools is a worthy activity. For if the new knowledge is provocative, the teaching dedicated, the students qualified, and the public service creative, ripples are sent to the ends of the earth and beyond. Ultimately, no greater leverage point exists in our complex society.

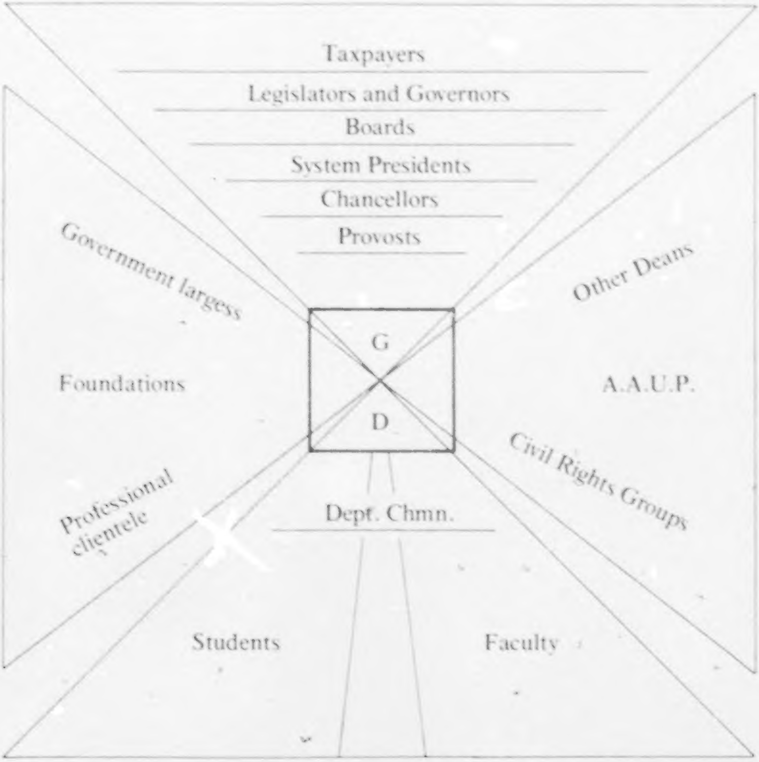
Furthermore, running a graduate school or program is a marvelous window to the world. Not only is one constantly informed by the light of the intellectual stardust daily tossed around by one's peers, one is exposed to a microcosm of modern and increasingly universal administrative truths which I would submit have meaning far beyond our proximate settings.

Graduate deans have moved over several decades, I believe, from sitting on the apex of an administrative pyramid, to acting as petitioners in the transcept of an iron cross, to behaving like nimble spiders in an enormous web of tensions. If you find these graphic analogues silly or recondite, I apologize. I have drawn them for presentation in the hopes that an explanatory legend might clarify what I have in mind.

Time was, I think, when graduate deans—at least many of them—saw themselves as virtually autonomous rulers over academic fiefdoms. A Dean West at Princeton, a Dean Mosher at Syracuse, often played Duke of Burgundy to Louis XI-like Presidents and Chancellors. Their general message to superiors was "keep your cotton-pickin hands out of my territory." The art of this impressive patriarchy was essentially the art of divine right. Deans ruled! They administered the pyramid under them: assistant deans, department chairmen, faculty, graduate students, secretaries, and custodial staff. Hirings, promotions, the award of scholarships and fellowships, admissions, expulsions, salary increases, special library budgets, travel allowances—all these were either accepted discretions of the dean, or were controlled by those who in turn were controlled by the dean. I would remind you that Dean Oliver Wendell Holmes, Senior, "the Autocrat at the Breakfast Table," was also the autocrat of the Harvard Medical School.



Graduate schools as institutions were the long shadows of the men on top of the pyramid of organization. We sometimes forget how the corporate ethos of an earlier day tended to dominate academic organizations as well. This pattern of authority lasted well into the 1950's in some institutions, although signs of transformation were apparent in the 1930's and 1940's. The hierarchical pattern tended to be replaced by an iron-cross of administration with the dean as the person in the middle. This was traumatic for many graduate deans who felt they were born to rule only to learn that they were lucky even to influence.

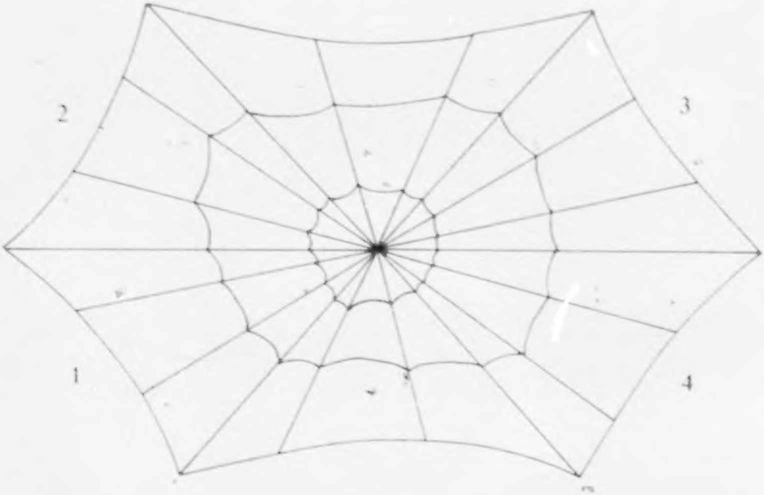

Taxpayers
Legislators and Governors
Boards
System Presidents
Chancellors
Provosts
Government largess
Other Deans
G
D
Foundations
A.A.U.P.
Professional clientele
Civil Rights Groups
Dept. Chmn.
Students
Faculty

As the pressures in higher education to grow in size, diversity, and service began to multiply in the late 1950's and during the 1960's; as categorical federal and foundation funding began to turn on the entrepreneur juices of graduate deans; they suddenly saw themselves operating in a world of complex-vertical and horizontal pressures and demands. Expectations increased, from the inverted pyramid above, that graduate deans would seek out categorical financial resources from outside the institution, and would be more sensitive to the growing ponderousness of the systems over them:

provosts, chancellors, presidents of state systems, boards of trustees, legislators and governors, and ultimately, taxpayers. While this was going on, student militancy and neuroticism over the war, a sellers' market for faculty, and on many campuses the unionization of custodial personnel, meant that the deans' subordinate pyramid became a series of sluice ways or channels directly into his office rather than a series of baffles to protect his time. Furthermore, increasing amounts of the deans' time were taken up in relationships with government agencies, foundation philanthropoids, and key brokers in professional associations and clientele professional markets. What few hours the dean had left were spent laterally on his own campus with the deans of other schools, with AAUP, and with civil rights groups on and off the campus. And an increasing amount of time was spent in endless and often acrid negotiations.

Complex as this world of the '60's became, it was in retrospect a world of heady development and optimism; for the enterprising dean, a period of exhilaration and creative problem-solving. The virtuosos found themselves exerting influence in all four directions, enlarging the center nucleus as a place of energy that radiated outward — permeating the various arms of the iron-cross.

Then, somewhere around 1969, the iron cross became an inadequate model. For the spaces between the arms began to be cluttered, and the graduate dean's administrative world became not an iron cross, but a massive web — a web of tensions. The definition of success became, as Harlan Cleveland has written, "not to get caught in the web of tensions you observe."



In addition to the segments that had composed the iron cross came such new developments as [1] PPB and MOB directives from State systems or from new staff in the Chancellor's office; [2] bureaucratic directives from Washington on affirmative action, faculty unionization, and accountability systems; [3] lawsuits from representatives of aggrieved minorities or majorities; [4] signals that the energy crises might discombobulate the entire educational system. And there seemed to be less room for initiative in keeping the forces of the older iron-cross system at bay: less money, more acrimony, and more complex governing arrangements. It was enough to take the fun out of it all. Rather than an entrepreneurial titan, or four-way broker, the graduate dean is in danger of becoming the victim of this new and formidable web of tensions. A few may become prodigiously skillful and intrepid spiders like Charlotte in E.B. White's lovely book, scurrying freely across the threads of the web somehow finding time to save the threatened "Wilburs" of the world. But for many of you the exhaustion will exceed the exhilaration; the very complexity of the web will make it increasingly difficult for you to find time to think high thoughts, to dream great dreams, and to exude that reassuring optimism that is so necessary, but that is so often a product of not feeling harassed to the point of distraction.

I wish I had some words of wisdom or comfort to ease the burdens you carry. I doubt that matters will get much easier in the years immediately ahead. Some of us are trying to reverse the ebb-tide of Federal support for graduate education. If we are successful, it may help a bit. We will also try to monitor and discourage the more egregious efforts of misguided officials or politicians who believe that externally imposed accountability systems and bureaucratic regulations are all that is needed to make higher education "shape up." But I would hazard the guess that your resiliency in dealing with the web of tensions you live with day by day will depend increasingly on your own capacity to find inner satisfaction in carrying out the privileges that are yours:

> — the privilege no longer to rule, or even to broker, but to persuade — for persuasion, as Plato has reminded us, is the divine element in the world;
>
> — the privilege to minister — to help the angry down from their highs; to help the disciplinary pedants to escape from their narrow boxes; to help the once brilliant teacher, now crippled by alcohol to overcome his compulsion; to help the suicidal graduate student out of his despair.
>
> — the privilege to prophecy — to help identify and correct existing as well as past injustices; for example, injustices to minorities, to women, to students; and to catalyze a more open discourse friendly to the dignity of all; to create new curricular paradigms.

You may not be praised or recognized in any special way for these contributions to civility. But your wife will know, or you yourself will know, that in some small way you facilitated the functioning of the complex enterprise of which you are a part.

Why bother?

Winston Churchill was once asked why Britain fought. He replied, "You'd find out if we stopped."

What if you stopped? What if the entire graduate enterprise in this nation shut down? Would it make any difference? It would make only this difference: that the basic scaffolding of the intellectual and professional life of this nation would come tumbling down. At first, little change might be noticed. But ultimately doctors would malpractice from ignorance; bridges designed by untutored engineers would collapse; literature and the performing arts would be held to no standards, and would dissolve into blobs of jelly; economics would become a broken record of inutile theories;

philosophers would play sloppy word games without rules or rigor; astronomy would collapse into the black holes it has only recently discovered. The collective memory enshrined in our research libraries would dissolve into the aphasia of disuse. Above all, there would be no specially protected environment friendly to the restless probings of the human mind. It is not too much to say that our stature as humans would be reduced by cubits — for we would no longer be standing on tip toes trying to touch the face of some beckoning mystery.

Take heart! For perverse as it may seem, lodged in the interstices of the web of your tensions, buried in the syntheses of the often angry dialectic you facilitate are the burgeoning seeds of the purpose of persons and, perhaps, who knows, the glory of God!

Fourth Plenary Session
President's Report and Business Meeting

Thursday, December 13, 1973, 7:30 p.m.

Presiding: Jacob E. Cobb, *Indiana State University*

President's Report

J. Boyd Page

The ritual of the annual President's Report presents both opportunity and challenge. I continue to feel that it is a privilege as well as an honor to serve as President of the Council. I find it difficult however to provide a complete picture of the many activities of the Council without slighting significant activities, or appearing to take credit for what the Council is doing and for what has been accomplished.

I wish to do neither of these. Nor do I wish to resort to reading a "laundry list" of developments and activities. And yet, the level of activity has sharply increased during the past year, our collective impact outside the graduate community has surely been magnified, and the numbers of deans active in Council affairs has shown marked growth. It is platitudinous to assert, as I do, that effectiveness of any voluntary association results only when many individuals work in association to achieve common objectives. On the basis of this criterion, if no other, the Council can with certainty be said to have developed into a more viable and forceful instrument, serving both its constituency and society more effectively than before.

No individual can take credit. I am fortunate enough to be in a more favorable position to observe all that goes on and occasionally to assist with direction. Our excellent central office staff serve most of you directly with grace and efficiency. I owe to them my deep personal appreciation and invite you to join in this expression of appreciation. Will Mrs. Corbin, Mrs. Pittore, and Dr. Ryan stand and be recognized, please.

The Executive Committee, and particularly its Chairman, Dean Cobb, have served most effectively, with strong dedication to the affairs of the Council. They have responded to calls for extra meetings, have given up weekends to come into Washington, frequently necessitating difficult travel and awkward schedules, to the end that the work of the Council is pushed forward. The many results of this level of activity testify to the wisdom of the Council in expanding the Executive Committee last year to its present size of thirteen as opposed to its former ten.

Our new, more democratic procedure for nominations and elections has been put into effect during the past year, as has the new organizational pattern of limited standing committees with the largest part of the work of the Council directed through task forces. You have seen the results of much of this activity in this meeting, where several of the task forces have borne responsibility for major segments of the program. Other activities continue with results still to come.

The Executive Committee developed, with much discussion, a significant statement of principle supporting the provisions of Title IX of the current educational legislation. This has been received with very favorable comment and has, with only minor modification, been incorporated into the forthcoming position paper of the American Council on Education as a clear expression of the essentiality of a strong graduate capability in the United States and the justification for its support by federal funds. There is no way to estimate the impact of this position on future legislation, but all indications are that this was a most significant, if little publicized, activity of your officers. Close and continuing liaison has been established with key officials in government. Only time will show the effectiveness of this expanded level of activity.

Your representatives serve on or act as advisors to commissions, task forces, advisory panels, or workshops sponsored by many other agencies, such as the Education Commission of the States, OE, IIE, CU offices of the Department of State, WICHE, NCHEMS, African American Institute, and ACE, to name only a few.

I am sure that these passing references do not do justice to the myriad activities that our office is concerned with but time will not permit enumeration of details.

A highly successful conference on the doctor of arts degree in its current manifestation was held with support of the Carnegie Corporation and the Johnson Foundation. A joint statement on accreditation of graduate work was prepared in conjunction with FRACHE and the National Commission on Accrediting.

Our consultation service, under the management of Dr. Ryan, has expanded. All signs point to a moderate, continuing expansion. In calendar year 1973, 112 consultants have reviewed 57 programs at 14 institutions. Consultations for 24 additional programs are now pending.

Section four of the continuing series on GRADCOST is soon to be published, with section five hopefully, to follow.

Cooperation with GREB continues at a high and effective level. *The Graduate Programs and Admissions Manual* is now in its second edition. The initial publication went extremely well with 60,000 being sold worldwide.

You know of the work of the Panel on Alternate Approaches to Graduate Education through release of *Scholarship for Society*. There has been some reference to this report in earlier sessions of this meeting. Through our annual enrollment surveys and through the Admissions Manual a very sizable and unique data base is being developed. Recognition of the Council and the GREB as the single source of reliable, current trend data has become established. Many agencies both in and out of government eagerly await our reports. We are expanding analysis of the data presented, and this too is well received.

Having given both a sketchy and inadequate report of major activities of the Council, its committees and task forces, let me now announce and release this year's graduate enrollment report.* I am pleased to acknowledge our debt to Bob Altman of ETS and his staff for their efforts. Under great pressure of time, they compiled the data you submitted into the report. We thank all of you for the promptness with which you have responded and for the magnificent response. This year it is again 91 percent—a rate that many

*Editor's note: The full report of the survey may be found in the Appendix on page 141.

of our sister organizations in Washington view with wonder and envy.

I cannot adequately summarize the report; that you of course will do. We hope you will find it useful. I can testify that this is a most significant activity, as is Part II, still to come, and urge again your continuing strong support.

I will mention only a few of the most striking figures.

This year, as of October 15, graduate enrollment in public institutions has increased 5.7%. In private institutions, it increased 1.5%. Overall, the graduate enrollment this year shows a 4.8% increase. My own guess has been that it would be a little over 1%. Many people still have the view that graduate enrollments are suffering decreases and are bound to go down. For your comparison, in 1971-72 the percentage increase was 1.4. Last year it was 1.9%. This year, it is 4.8%. First-time graduate enrollment, which tells us a good deal about current trends, exhibited a 4.5% increase. The private institutions had a 6% increase. Total enrollment shows a larger increase in public institutions. The increase is larger in private institutions for first-time enrollments — 4.8% Two years ago, the increase was 2.1%. Last year it was 3.5%. The steady increase in the number of first-time enrollments indicates that students are enrolling for graduate study in spite of adverse publicity and many public misconceptions.

The number of graduate assistants on appointment reflects a 1.8% increase. Two years ago, there was a decrease of 1.9%; last year, an increase of 2.5%. The number of graduate fellows this year demonstrates a 7.8% decrease. This, however, followed an 8.4% decrease last year which in turn followed an 11.5% decrease three years ago.

The number of master's degrees increased 2.4%. Compare that with two years ago when it was 9.1% and last year when it was 2.4%. The number of Ph.D. degrees being awarded three years ago was 8.9%. Last year it was 5.9%. This year there is a 1.7% increase. The number of part-time students as a proportion of graduate enrollment in 1971-72 was 50%; last year it was 52%. This year it is 54%.

Copies of the report will be available at the registration table as you leave the meeting.

In summary, I have, I am sure, been deficient in my thanks and in my coverage of the many activities conducted by or in the name of the Council. My own assessment is that sincere appreciation is due Dean Lester and his committee for what surely has been an outstanding meeting in most pleasant surroundings. I thank the members of the Council for pleasant and valued associations and shared activities. The prophets of doom, whose strident voices were so loudly heard only a few short years ago, have had their due comeuppance, and I see now a determination and a spirit of cautious optimism for the job ahead. That, at least, is the posture with which I approach the coming year. We hope that it can be a year of accomplishment as well as progress.

Report from Graduate Record Examinations Board

Michael J. Pelczar, Jr.

Dean Cobb, President Page, ladies and gentlemen—It is a pleasure for me to present this evening the annual report of the GREB to this group.

Since it is raining and there isn't much else to do, I can present my twenty-eight page report.

The Graduate Record Examinations Board Chairman has, in the past, presented a summary of activities of the Board for the past year. This year, the Board has decided to publish a more detailed report of its activities. This report will be distributed to the deans on or about the first of the year. I have a draft copy of this report in my hands. What I will try to do in the next five or ten minutes is highlight some of the contents of this report. There are members of the ETS staff in the audience who will be with us tomorrow; namely, Maryann Lear, who serves as Secretary to the Board, Dick Burns, Bob Altman, Bruce Hamilton, and others so that you might want to inquire of them about some of the details of the various activities in which we are jointly involved. I am sure that you are aware that many of the activities of GREB are conducted jointly with CGS. There are others that are conducted independently, and there are other activities that involve other professional associations. The activities can be categorized under three headings: testing, services, and research. To these we can add a miscellaneous category. I will comment on each of these briefly.

First, under the testing program three remarks might be appropriate. In the year 1972-73 we experienced the first absolute decline in number of candidates tested, a drop of 1% from the 1971-72 part. Secondly, we have, and I am sure that we have been aware, of some of the difficulties associated with implementation of new systems for test scores and reports. The new procedure was designed and tested over a two-year period with the obvious objectives of more information, improved services, and reduced costs; but as computer programs sometimes are accustomed to doing, they do not always respond to all of the pre-testing as was anticipated and some unexpected problems emerged. Very intensive studies were undertaken by a special task force to diagnose difficulties and to implement corrective measures. I am told that this incident was really a nightmare for the staff! The indications are that the process is now operating smoothly and on schedule and the difficulties are hopefully behind us. The third pertains to the GSFLT, the Graduate Student Foreign Language Testing. This was reviewed during the past year because of the fall-off in foreign language testing. The Board approved certain recommendations received from the GSFLT Committee to combine the language testing with the regular test administrations. This is being done to economize without any deprivation of services. The Russian test was dropped, but this is still available from the Princeton testing office.

Let me just run over briefly some of the services program activities. The services program includes the Minority Graduate Student Locator Service, which was instituted in 1972 and is being continued. In March 1972 the GRE Board approved experimental production of a Minority Graduate Student Locator Service designed to bridge the gap between minority students interested in graduate study and graduate schools seeking to increase their minority enrollment. The graduate schools were provided with information on students so that connections could be more conveniently made between student and institution. Some 5,000 students submitted usable questionnaires in the first survey, and 6,000 students submitted questionnaires in the second survey. Approximately 150 institutions were involved with this information exchange, i.e. were provided with information about students. Now, one change in this program is a fee of $340 which is to make the program self-supporting. Boyd Page has touched upon the *Graduate Programs and Admissions Manual.* This is a joint effort between GREB and CGS, and the second edition of the Manual appeared in 1973. You might be interested to know that the GRE Board *Newsletter* is distributed to 19,500 people in the graduate education community. If any of you are not included in that 19,500, please let Maryann Lear know and she will add your name to the list. We attempt, through the *GREB Newsletter*, to inform the graduate community of the activities of the Board.

Under the category of research, the Board has a Research committee which is comprised of Lincoln Moses, Joseph McCarthy, Bernard Harleston, Herbert Weisinger, and ex officio members, the chairman and the past chairman of the Board. There are some thirteen rather major research projects that are being conducted by the Board. The reports of the research projects when they are completed are available to CGS or other individuals upon request. The report that you will receive contains a summary statement on each of the research projects and the status of the project. I have indicated there are thirteen projects currently underway. The Board and members of the research committee would like to receive any suggestions or comments that might be relevant to these projects that are under study.

In the category of other activities or the miscellaneous category, the Panel report ("Scholarship for Society") has been duly recognized and publicized at this meeting. There was an activity of which some of you may not be aware—a Conference of Deans of Black Graduate Schools. That was promoted and facilitated by the Graduate Record Exams Board in collaboration with the deans of Black graduate schools. Dean Henry Cobb and some of his colleagues attended a planning session at ETS early in the summer; and, as a result of this planning meeting, a larger, more formal meeting was held in Atlanta at the end of the summer. Approximately 25 deans of predominantly Black graduate schools were present. Some of us had the pleasure of attending and participating in the program which was very successful. Boyd Page has commented upon the Annual Enrollment Survey which is another joint project between CGS and GREB. That brings me down to about the last page of the written report where we provide a financial report. In these days you will perhaps not be surprised to see some of the figures within parens. That does necessitate reassessment of activities presently underway as well as those planned for the future.

I will conclude by reminding you that the first annual written report of the GREB will be in your hands some time early in 1974. Thank you for your attention.

Report of the Task Force on Disadvantaged Students

Edwin L. Lively

Mr. Chairman:

When I became Chairman of the Committee on Disadvantaged Students in December, 1970, one of the charges given was to survey special programs for the disadvantaged graduate students already in existence on the many campuses. Several drafts of a questionnaire for such a survey were developed by the committee, then the Council of Graduate Schools and the Graduate

Record Examinations Board agreed to co-sponsor a study. A joint advisory committee was created and finally a questionnaire was mailed to the membership of CGS in April, 1972. The results of the study were distributed to the membership in May, 1973, under the title, *Graduate School Programs for Minority/Disadvantaged Students.* If you have not yet read the document carefully, I commend it to you.

I wish to make three comments on the findings at this time:

First, only a small number of schools have developed a vigorous program to serve minority/disadvantaged students. The main characteristics of these programs include an articulated policy statement, cooperative efforts, between the graduate school and individual departments, coordination of recruitment, special services and arrangements, and evaluation under a single administrator or committee, and a definition of who is being sought and where.

Second, while a lack of commitment is present in some cases, many schools are unable to generate the resources necessary to do a good job, especially schools with limited breadth in their graduate programs and few or no doctoral programs. It is also reported that a number of schools have an honest concern about the maintenance of qualitative standards and various forms of waivers for admission standards, bridge-up work, and special forms of assistance that may be necessary. On the other hand, those schools that have taken steps along these lines do not feel threatened, and often report some very promising results.

Finally, the Task Force on Disadvantaged Students, as we are now identified, does not believe the data obtained in the study are adequate to proceed with another charge, namely, to develop guidelines in the recruitment, financial aid, special counseling and follow-up of disadvantaged students. The differences in the size of schools and the composition of their programs, plus limitations on resources and differing degrees of commitment, have not led to the emergence of clear-cut patterns which can be recommended at this time.

It is my understanding that this study will be repeated in 1974, and those results, combined with the effects of affirmative action programs may be more helpful. There is much to be done in all areas of graduate education for minority students but the responsibility must rest with the individual institutions at this time.

I wish to express appreciation to Boyd Page and Dick Burns for their support and efforts in making the survey a reality, and especially to Bruce Hamilton, who collected and analyzed the data and prepared the report. Each of the graduate deans should find something in it of value in planning for the future.

Report of the Biomedical Sciences Task Force

William Macmillan

Last year, the Biomedical Sciences Task Force convened informally at New Orleans and offered a forum for the explanation of problems in this area. Again this fall we had a forum exploring areas of interest to members of CGS.

We have identified many people who have specific interests in the administrative problems of biomedical sciences and medical school communities. We have also identified several agencies in the United States who have interests in this area, and we are developing dialogues with them. I would recommend to the Executive Committee that this task force be continued for another year.

New Business

J. Cobb: You will recall that last year, for the first time, the membership elected a Nominating Committee which was to make nominations for membership on the Executive Committee and nominations for service on the Nominating Committee for 1974. The elected members of that committee were Dean Arliss Roaden, of The Ohio State University, who served as chairman, Dean Lincoln Moses, of Stanford University, and Dr. Trevor Colbourn, Vice-President for Academic Affairs at California State University at San Diego. The appointed members from the Executive Committee were Dean Shirley Spragg, of the University of Rochester, and Dean D.C. Spriestersbach, of the University of Iowa. Dean Arliss Roaden will now present the report of the Nominating Committee for the Executive Committee.

A. Roaden: Mr. Chairman, I am pleased to report on behalf of the Nominating Committee. Our charge was to recommend one person for each vacancy on the Executive Committee and Nominating Committee. In accordance with provisions made last year in the constitution, we invited recommendations from the membership, and I might add that we received a good response from the membership in that regard. After studying those recommendations carefully, our nominations were distributed to the membership prior to the annual meeting.

For membership on the Executive Committee, I should like on behalf of the Nominating Committee to place the following persons in nomination—Dean Wendell H. Bragonier, Colorado State University. Dean Bragonier was elected last year to fill a one-year vacancy and is eligible for reelection for a full three-year term. It was the judgment of the Nominating Committee that he be presented to you as a candidate for a full three-year term on the Executive Committee. The second nominee is J. Chester McKee, Jr. Dean McKee is an engineering educator and has been Graduate Dean and Vice-President for Research for approximately four years at Mississippi State University. The third nominee for the Executive Committee is Dean D.C. Spriestersbach, of the University of Iowa. Dean Spriestersbach, likewise, was elected to this body last year for a one-year vacancy and qualifies for a full three-year term.

Mr. Chairman, these are the nominations for the three vacancies on the Executive Committee.

J. Cobb: Thank you, Dean Roaden. Are there nominations from the floor? If not, is there a motion for election by acclamation? Passed—unanimously.

A. Roaden: For membership on the Nominating Committee for next year, we are placing in nomination the following—Dean Dale R. Comstock, Central Washington State College. Dean Comstock is a mathematician and has been Graduate Dean for approximately three years. Our second nominee is Dean I. Wesley Elliott, of Fisk University. Dean Elliott is a chemist and has been Graduate Dean in recent years. Our third nominee is Dean William G.

Toland, of Baylor University. Dean Toland is a philosopher and has been Graduate Dean for the past four years.

Mr. Chairman, on behalf of the Nominating Committee, I place these three names in nomination for the three vacancies on the Nominating committee for 1974.

J. Cobb: Thank you, Dean Roaden. Are there nominations from the floor? If not, is there a motion to elect by acclamation? Passed—unanimously.

This completes the major business of the business session. I do have a few other pleasant duties to perform; however, before I do that, I would like to make a comment on the Executive Committee. In my opinion, the expanded Executive Committee was an excellent idea. I do not believe you could have had a group of people any more sincere in their efforts to do a job for the group. I do not believe you could have a group any more sensitive to suggestions made by individuals who are members. This has been an exceptionally good year from that point of view, if from no other.

I want to emphasize some additional things which President Page mentioned. First, this Washington office of ours is an efficient office. It is a pleasure to work with the group there. In my opinion, Dr. John Ryan has done a remarkably fine job this year. President Page has done his usual fine job; however, this year he has gone a bit beyond the usual. Some of the things he reported to you could have come only after a considerable amount of preparation on his part leading up to this point. The two secretaries in the office—I am not sure if this is the appropriate term—are excellent and it has been a pleasure to work with them.

I wish to say that I have appreciated having the opportunity to serve as Chairman of the Executive Committee this year and to consider as many of you my friends as I now consider you to be. It has been an extreme pleasure personally and professionally.

It is my very high privilege to announce the selection by the Executive Committee of the Chairman-Elect for 1974. The Chairman-Elect is S.D. Shirley Spragg of the University of Rochester.

Will Dean Charles Lester come to the platform? Dean Charles Lester, of Emory University, will be the Chairman of the Council's Executive Committee for 1974. It is my great honor to turn over the gavel of the office to Dean Charles Lester.

C. Lester: Thank you, Dean Cobb.

Since you will have the unusual opportunity to hear me give the Chairman's Address a year from now, I see no reason why I should give you the benefit of my wisdom at this time. I would like to say, however, that I have one desire for this organization during the coming year and that is to have 312 members working together to achieve common purposes.

Is there any other business?

I declare this session adjourned.

Fifth Plenary Session
Long and Short Term Prospects for Graduate Education

Friday, December 14, 1973, 10:30 a.m.

Chairman: Charles T. Lester, *Emory University*
John K. Folger, *Tennessee Higher Education Commission*
Norman Hackerman, *Rice University*
Nils Y. Wessell, *Alfred P. Sloan Foundation*

Charles T. Lester

I would like to take this occasion to thank personally all of the members of the Council who offered suggestions about the format and content of the program and suggested participants. The program we have this morning came as the result of a suggestion from a member of the Council, and the speakers that are here were all suggested as well by members of the Council. I am pleased that we were able to respond with an excellent panel and a topic of great interest.

The topic this morning turns our attention to the future. Having spent a great deal of time bemoaning the loss of the glorious past, having spent a great deal of time contemplating the horror of the present, we hope that we can look with more relaxation and joy toward some kind of a happy future.

The topic is "Long and Short Term Prospects for Graduate Education." The panelists are a state coordinating official of higher education, Dr. John Folger, who is Executive Director of the Tennessee Higher Education Commission. Many of you remember him as a former colleague graduate dean at Florida State University. Our second speaker is Dr. Norman Hackerman. Dr. Hackerman is a member of the National Science Board as well as President of Rice University. Our last speaker will be Dr. Nils Y. Wessell, President of the Alfred P. Sloan Foundation and formerly President of Tufts University. All three of these people speak not as graduate deans but as people interested in, concerned about, and knowledgeable of the overall graduate education scene.

John K. Folger

Now that the love affair between the graduate deans and Washington is over, there is not much alimony for graduate education in the settlement. As a result, graduate schools are looking again at the old girl down the block, the state government. The state has always been there, and has been the most faithful supporter, and in the case of the public universities, the largest supporter of the graduate enterprise. For most states, and for most of the '50s and '60s that support was hard to identify specifically. It was just part of the total budget and was given rather generally rather than on the basis of specific programs or accomplishments.

A new day has dawned, however, and the states are trying to figure out what their role in support of graduate education will be—and how the graduate enterprise will be evaluated for support.

I would like to review with you briefly what some of the trends are in the relation of graduate education to the states—and then explore some of the prospects for the future.

The first trend is a changing enrollment pattern. Graduate enrollment is growing in new graduate programs in state colleges, in off-campus centers, and among part-time students especially in education and business. It is dropping in many arts and sciences fields and at the more prestigious graduate schools the number of full-time students is going down. This signifies a change in the motives of students. More are seeking a credential which will help them in a tight job market, and fewer are entering the traditional apprenticeship research training for academic employment and other research jobs.

One of the signals of this change is the rise of the non-residential doctorate. Some of these have been accredited under the banner of innovation, and some are being operated in that vast limbo between the respectable institutions and the outright diploma mills.

I think these enrollment trends will continue in the next decade—and they raise another issue—what is happening to quality?

Trends in quality are hard to describe. When graduate education was a smaller enterprise, with a central goal of preparing scholars and researchers for academic positions, there was more agreement about what quality was. In the best graduate schools, quality was what the graduate faculty said it was. Since their reputation and prestige depended on their ability to select and indoctrinate good people, the system worked pretty well, even though the graduate deans have always been concerned about issues like downgrading of the M.A., the dilution of quality, and the maintenance of standards.

Now more institutions are giving graduate work. More students are seeking the credential that will get them ahead in one of the big bureaucracies in our society—whether it be government, the big corporation, or a public school system. Some of the traditional standards such as two foreign languages, a full year of residence, and evidence of significant research accomplishment have been successfully attacked as being irrelevant to the new students and their new program objectives. But no new functional methods of determining quality have appeared. Graduate deans know that quality is so complex that it can't be reduced to a few quantitative measures. It has to be sensed, rather than measured. But the sensing done by the graduate deans is not long enough for the general public.

This situation invites new groups to enter. If the graduate schools do not regulate themselves and protect the public from fraudulent and questionable practices, then government will enter the picture as it is already doing. There will be more state licensure of degrees, more state regulation of educational activities. States are not well prepared to perform this function but they are probably going to do it anyway.

The third trend I would like to discuss is the increasing skepticism of the public about higher education. There is widespread feeling that higher education is overexpanded in relation to the labor market, and that a college degree has been oversold as a route to a good income and upward social mobility. From this attitude, it is only a small step to the state legislature which feels that higher education is oversupported, and that we ought to be more accountable, more efficient, and require the professors to work more.

Among the members of the legislature, it is graduate education which is especially vulnerable. It is costly. We are turning out Ph.D.s who can't find teaching jobs. There are too many small inefficient programs. Why don't you cut back on graduate education—save money—and use the savings for vocational education which is practical?

I believe this skeptical attitude toward higher education is going to continue for the next few years. In a sense we are having the natural reaction to the earlier view that higher education was a good thing which would solve all our problems. Like glamour stocks, we have oversold our future potential to deliver and our price is dropping in the market of public opinion.

What do these trends mean for the future relation of the state government to graduate education?

The setting is that nearly every state now has some overall planning and coordinating mechanism for dealing with higher education. There is the legislative and governmental expectation that in the graduate area especially, these state agencies will regulate the competition between schools for programs and students, will promote efficiency and cost savings, will keep out the fraudulent degree programs, and in general keep higher education accountable.

If existing state structures won't do the job, the legislature's attitude is that we should get something stronger that will do the job. So, we see legislation to create statewide governing boards (Maine, Wisconsin, North Carolina, Utah, West Virginia) or strengthen existing coordinating arrangements (California, Kentucky, Louisiana). The individual campus, as the latest Newman report points out, is increasingly enmeshed in state bureaucracies and multicampus systems, and is losing its autonomy.

What are the states doing? Most have master plans that are attempting to control or regulate the further development of graduate institutions. These role and scope plans have not been very effective in the past in curbing institutional ambitions, but they may be more effective in the future because there is increasing public realization that we do not need more graduate education. The paradox is that the newer campuses have usually been given a few programs as a compromise—programs in education, business, and other practical, professional areas, and these have been the very programs that have been booming in their appeal to students. This leads established graduate schools to take more programs off campus to keep up with the competition thus furthering competition and proliferation that the role and scope plans were designed to prevent.

A second thing that states are now doing is to look much harder at the manpower picture and to turn down programs that may be good, but are not needed. The extreme in this is the moratorium on new doctoral programs established in some states.

Howard Bowen and others have cautioned against over reliance on manpower projections in educational planning, citing their demonstrably bad record of prognostication. But the states are likely to continue to emphasize the manpower dimension a lot because both the public and students are concerned, and because it will be a much bigger factor in the future. The challenge then is —how can we estimate manpower needs better?

A third trend that I see very strongly is that the states are taking more and more interest in the quality of its programs, saying, if we are going to have to cut back, it is not sensible to do what some states have done which is simply to have a moratorium on new doctoral programs. A moratorium is a simplistic approach to the solution of a very complex problem. States like New York are saying, we must take a look at the quality of these programs, and if we are going to cut back, let's cut back on the ones that are least effective and let's put our resources into the ones that are more effective. Here again you see an area—the assessment of quality—in which the state has not moved in the past. But it is going to be involved in the future. New York State has probably done the most elaborate job of reviewing its graduate programs and they are trying to determine which ones are the quality programs that should be continued and which ones should be cut back. Other states have done this too, but most of these assessments have been based primarily on quantitative criteria. For example, are the programs too small and too inefficient? It is very interesting that most of the efforts to cut back on small and unproductive programs turn out not to save any money. If you phase out a program with just a few students in it you probably were not spending very much money on it in the first place and many of these phase-outs are really curriculum consolidations and have more of a cosmetic than budgetary effect. The legislature is quite frustrated because the rule seems to be, a new program always costs more money, but when one is phased out, no money is even saved.

There is another dimension to this whole picture—what is the role of student choice? Shouldn't we leave this kind of determination to the student, let him decide whether the program is any good? The efforts to measure quality are so difficult and get tangled in so many political hassles that it may be easier to let the students decide. Let's leave the choice to the students and let the students decide which programs will succeed. Students are pretty sensible and they are the ones that have the most at stake in this whole process. So, let us turn to them as the criterion for determining success or failure of a program. This would involve a different state-funding approach to graduate education and would give the money to the students. This approach is one that the public institutions have strongly opposed because it would reduce if not eliminate the state appropriation to the institution, would require much higher fees, and big grants-in-aid to the students.

A major problem in allowing student choice to determine the support patterns is that they have, at the present time, poor information about what the demands will be three to five years hence. Students have rushed into law and many people are saying by the time this increased input of law students gets out we are going to be faced with the great difficulty of finding jobs for them. I am not too much worried about law students because I think lawyers tend to create their own market and the more you have, the more they sue each other thus generating their own business, and at the same time, making our society more litigious. We do have some very serious difficulties in trying to predict the job market in the future and give students the kind of information they need—not just what the market is today but what it is going to be like a decade hence.

To summarize, there are important problems in planning graduate education which must be addressed at the state level. The day when each institution was free to do whatever it wanted to, within the limits of its resources and ambitions has passed, and for better or worse, institutions are going to be involved in coordination and planning with the states. We have made a number of mistakes of both omission and commission in the past, and my advice to you is to help in trying to do a more effective job of planning, coordinating, and budgeting for higher education in the years ahead. The important problems of making programs stronger and more relevant for students, making access to graduate education dependent on ability and not on wealth, and avoiding excess programs in fields where jobs are scarce, cannot be solved by state officials alone, anymore than they can be solved at the institutional level. But if we can work together, hopefully we can achieve more effective planning and coordination in the future.

Norman Hackerman

I have a bias for interactive undergraduate-graduate education on those campuses that can tolerate it, that is, interactive in its original sense. Originally, post-baccalaureate work sprang up on campuses where the faculty, largely concentrating in pre-baccalaureate teaching, took on this extra task out of interest. It is not so now in most places or for many faculty members.

One of the problems which graduate education faces at the present is that it has tended to separate itself. This Council is an example of how graduate education has separated itself from its source. As a result, graduate education has laid itself open to the problems of separate funding and separate costing. It turns out to be a rather high-cost operation in its separated form and the return to society is not as evident to the public as is the return for post-baccalaureate professional training. Problems of deferred value and indicated return are not new, but good solutions to their acceptability would be.

To turn to prospects, I think the short term trend is clear with the possibility that it may change tomorrow. Those people who are in the pipeline and who are interested in professional degrees at either the first graduate level or the second graduate level are pretty well fixed. That was not true a year or so ago, but is now short of a depression.

The Ph.D. candidates who are dedicated to a career in academe are in some difficulty, a statement that does not take great vision at this point. They are in trouble because there are not many jobs available for foreseeable time. There are too many of us who are blocking them off in a period when further expansion of academe is unlikely because of lessened college level pressure (not necessarily lessened graduate level pressure).

There is currently a greater trend from the more esoteric toward the more professional activity for several reasons. Interest in professional activity has always been there, but we in our zeal and wisdom have molded our protégés away from professional activity by a tendency to create in our own image. That image is a good one, but it got many people who would be apt problem solvers into doing inept research. That is a serious indictment, but I think it is supportable by evidence which need not be pursued here. At any rate, interest in non-academic post-degree activity is clearly higher now.

Graduate student support has shifted from general federal public monies to more local money and to the individual via himself or his family. It is interesting that this shift which has been taking place for the past three or four years has caused little or no drop in graduate enrollment or even much redistribution by field yet. This suggests that motivation for postbaccalaureate education does exist without financial enticement—a desirable state of affairs.

Perhaps this self-motivation is because of increased professional interest in contrast to purely academic interest. In any event, it gives reason to believe that post-baccalaureate education may not be in as bad shape as many think it is. The important point is to have people who are interested in going on beyond the baccalaureate degree. We have sort of taken our eye off that facet and thought instead almost wholly in terms of the money available to support people who might be interested. This is not to tell you to forget financial support, but to put it in better perspective relative to motivation.

In order to talk about the long term trend we ought to assess some assumptions, look at some possibilities, and then consider the prospects. One thing already mentioned by Dr. Folger needs the fullest consideration, namely, the effect of the change in undergraduate composition on the graduate composition of the future. To quote from page 24 of *Enrollment Trends in the South*, an SREB report dated August 1, 1973:

> A look at the future, based on current indicators, may be summed up as follows: Women are enrolling in greater numbers and remaining in college longer. Blacks are viewing higher education as the path to upward mobility. It has been estimated that 60 percent of the "new" students in the next ten years will come from the half of the population with lower family income and a lower level of academic aptitude. Public enrollments, particularly at community colleges, may be expected to increase more rapidly than private. Part-time enrollments are increasing faster than full-time enrollments. The pattern of interrupted attendance may be expected to grow, with increasing percentages of older students contributing to the total. The range of postsecondary options, including programs of the proprietary schools, will continue to increase. In brief, the face of postsecondary education is changing and, in changing, it is also growing in new directions. To guarantee that the new patterns of growth make for improved adaptation to society's changing needs should be a major goal.

There is no reason to believe that trends in other parts of the country would be markedly different. If so, postbaccalaureate enrollments are apt to change too and particularly in terms of part-time students. There isn't much question that we'll have a different kind of graduate student group ten years from now than we have now, albeit there will still be an appreciable fraction like those who are currently in the process.

A second factor which we have to assess is the assumption that the quality of society improves with the general level of education. This has been taken as an axiom or has been accepted as an article of faith. What we have to assess is whether this is true based on our concept of formal education, whether it has a saturation limit at any level, whether it requires continuous education, and whether, as I have read somewhere "extensive graduate education is a necessary staple of society." In other words can it be shown that the education of the individual at some point becomes more an individual benefit than a societal benefit? There are other questions too, such as: Can we convince ourselves that extensive graduate education is a necessary staple of society? If so, can we convince others? If not, what is the case and what should our stance be?

We have to determine also if both, either, or neither professional and academic preparation need concentrating in fewer sites or spreading to a larger number of sites. And is it politic to do either one of these things, particularly the former? One problem in this area is our inability to divorce our self-interests from the real question. We hear arguments about concentrating graduate education and counter-arguments about spreading graduate education, but they generally stem from the 'developed' and the 'developing' institutions respectively or from their supporters who have other than education as their central interest.

Further, will public support of the second level postbaccalaureate professional degree have a detrimental influence on a non-supported second-level post-baccalaureate academic degree? In other words, when does enticement enter? Are we going to lose those people who if given a free rein would normally go toward academic training?

Without specifically answering all of the questions posed above, I will list a few possibilities for the future of graduate education. One is that everything will stay as it is. That is, each institution will do what it wishes and will do so with minimum to zero coordination. This is unlikely to the extent that external support is required.

Another possibility is that there will be systematizaton at one or more political levels. Then the system agency will have the following alternatives: (1) to concentrate the second level of graduate work on very few campuses, (2) to reduce the emphasis on graduate work and increase the emphasis on undergraduate, i.e. on tertiary education, (3) to put undergraduate and graduate activities on separate campuses as is now the course with some medical schools and some law schools, or (4) to integrate undergraduate and graduate education even better than it now is whether in all current locations or only in a select few.

Now as to prospects. Support by the federal agencies depends upon where it is needed, who recognizes the need, and where the need is best served. With this in mind, one needed area is support for graduate students. This will be available from federal agencies although probably not in full measure. Another probable support mode will be institutional and will be by federal agencies with nourishment of research as a major motive. Again, full support is not likely. One problem is that support by federal agencies will not lose its sometimes capricious quality unless it is tied to a recognized, able, adept indicator, for example, to some index like the GNP.

Support by the institution and by the individual will be most important because public support will respond to employment demand more sensitively than to employment needs. This does not inspire smooth response since demands in particular are temporal and non-predictable even on five-year centers, much less on two-year centers. This has been amply demonstrated with respect to engineers in the last two to three years.

Foundations and industry support will continue to be small and is likely to be quite specific. Yet, it is important not only to those for whom the support is used, but also as a continuing critical contact.

Prospects of either spreading graduate education or concentrating it on a few campuses are not yet discernible. Nothing dominant is apparent yet which would permit making a guess. If a guess has to be made, it is more likely that spreading will occur. This is based on the probability that the more federal funds there are involved the more likely it is that the needs of diverse geographic settings will be met.

The prospects of graduate student composition are fairly clear. The more heterogeneous the population in the undergraduate school, the more heterogeneous the population will be in the graduate school. Ultimately, a more heterogeneous faculty will appear. This is not bad provided we make every attempt to keep from losing the small but vital component in creative scholarship.

So, to summarize there will be more part-time and more long-time students with more professional interests and more self-support. There will be fewer people dealing with stochastic-ignorance-reducing production and more people dealing with definable-ignorance-reducing production, i.e. problem solvers. Also, there will be increasingly interactive university campuses if only because separating the graduate function from the rest would be costly. Losing the graduate function as a source of people and research would be even more costly.

Nils Y. Wessell

To say that the future of graduate education in the United States, whether we speak of the near term or the short term, is closely bound to the future of higher education in this country generally is to earn the "cliché of the academic year" award. However, there are many generalizations of a predictive sort about higher education which just do not make sense when applied to graduate education. It is my thought that we should examine both kinds of statements and that through such a consideration we might better anticipate the future role of graduate education in both academic and public interest terms.

The ways in which graduate education's future is tied to the future of higher education generally have become almost self-evident, at least self-evident to the point that ticking them off for a group such as this is almost condescending. Future undergraduate enrollments, for example, will determine the need for graduate assistants, the size and in some cases the quality of specific departmental faculty, the particular disciplinary areas in which the individual institution can afford faculty representation, the overall general support of the university as reflected in tuition payments or state appropriations or both, the academic market demand for Ph.D.s and master's degrees, and a host of other variables which will have a direct impact on graduate programs. The forecasts of such enrollments, at least into the 1990s, are not encouraging.

The changing mix of undergraduate enrollments, quite apart from their size, will also have its effect. If the wave of the future in higher education is represented by the community college, and if the notion gains ground that the holder of the conventional Ph.D. is ill suited to teaching in the community college, additional implications for graduate study are made plain. Other changes in the undergraduate mix are already here and beginning to exert their influence on postbaccalaureate programs. For example, increased minority undergraduate enrollments in institutions whose intellectual climate spurs the student on to graduate school are bringing to the door of the graduate school problems not entirely resolved at the undergraduate level, such issues as changed admission standards and compensatory or remedial preparation. In John Gardner's words, can a graduate school be both excellent and equal?

In addition to enrollment levels and the enrollment mix, what will be the effect on graduate education if as some predict large numbers of secondary school graduates attend college in the formal sense for only one year and then at irregular intervals over their life-times return to college level studies. Such a development if it comes to pass will not only alter what is expected of the individual trained for college teaching in our graduate schools but may have its influence on the kinds of schedules and commitments graduate students themselves make.

In dwelling on these illustrative concerns are we paying too much heed to the academic marketplace where services having to do with the *transmission* of knowledge are provided and not enough to what many would claim should be the first concern of advanced study, namely, the *extension* of knowledge? I will return to all of this later. For the moment my aim is to put on your mental blackboards as background for my later remarks the general statement that what happens to higher education generally in this country will have a great deal to do indeed with the future of our graduate schools, but that such consideratons are by no means the only ones.

One further background statement is also in order. It is that while I am fully aware that I have been invited here as a foundation executive, I find it difficult to hold constant or neutral my past experience as a university president and my current experience as a member of one state-wide board of higher education and one board of a large city-wide university system. More than that, I do not presume to speak for foundation executives generally. They too have their diversity and their differences of opinion. But there is solace in the fact that as the last speaker at your meeting what I have to say can hardly be expected to be characterized by novelty.

With these demurrers, let me to my task.

I would address myself to four issues, first because four issues represent a manageable number, and secondly because they are issues with respect to which I have some definite views—not necessarily wise or enlightened, but definite. They may well not be the four most important issues facing you as graduate school administrators, but I cannot believe that you do not have all of them somewhere in your own top ten. My shorthand for the four is: (1) numbers, (2) financing, (3) access, (4) purpose and planning.

I have already made reference to the undergraduate enrollment projections which clearly forecast in due course a decreased need for the kinds of services graduate students have been wont to provide for pay as teaching or laboratory assistants. But as I need not remind you, undergraduate enrollments also represent the pool of possible candidates for graduate study. I suspect, however, that it is not the absolute number of baccalaureate degree holders turned out each year that is the most important factor. Interest and motivation are of significant influence and these can change, witness the swings in interest in law, medicine, and engineering over the last decade. Some of these swings represent changes in the value systems of the young, others represent market demand which seems quickly to influence the future educational plans of undergraduates.

This is not all news to you but I do think that we are inclined to sit back and wring our hands when enrollment trends are negative or rejoice in our unhappiness when enrollment trends are at flood tide. There is a public interest that goes beyond hand wringing or rejoicing. We can make a greater effort to insure that the career plans of the young are less influenced by fads and fashion and more by an accurate and thorough understanding of the public interest. We can do more than we have in developing a better public understanding of the critical importance of certain high cost graduate programs as well as in enlarging the public understanding of what is meant by knowledge for its own sake. Science has come now upon public disenchantment and while this disenchantment bodes no good for advanced study in general, many a humanist must smile when he hears of the hurt and disillusionment his brothers in science feel over their public image. While the reasons for the disenchantment are quite different, the end result is the same.

The humanist and the social scientist must also smile together when hearing scientists express concern over what might well happen to graduate study in science, not alone because of decreased numbers of students but because of increased dropping out by students generally and the possible growing commitment to universities without walls. While it has not been uncommon for the Ph.D. candidate in the humanities or in the social sciences to spend seven or eight years in the acquisition of the degree, any such general lengthening of the time it takes to achieve a doctorate in science can only mean that the student receives the doctorate after he has passed his prime as a research scientist. There must be ways to make of graduate study less of the numbers game than it is at present.

On the issue of financing graduate education I will try to avoid those matters with which you are certainly more familiar than I am. My references, therefore, with respect to this subject will hardly be balanced. They are not designed to be.

At the October meetings of the American Council on Education, Howard R. Bowen, Chancellor, the Claremont Colleges, in warning us about encroachments upon academic freedom which grow out of the way higher education is financed, describes "two new models of the university." The one he calls "bureaucratic" since it makes of the university simply an agency of government with the important decisions made by state or federal bureaucracies. The second he calls the "full-cost pricing" model in which user charges finance services rendered. More specifically in this model instruction is paid for by tuition, student aid is covered by long-term loans, auxiliary services by fees, research by grants and contracts, and public services by fees.

He goes on to say, "These models are not just figments of my imagination. They are being advocated by most of those who would reform higher education. The bureaucratic model is advocated by those who emphasize the need for 'planning and coordination'; the full-cost pricing model is advocated by those economists who believe that the market can solve all problems and by those government officials who would like to get higher education off the public budget. Both models are consistent with the 'jam factory approach,' namely, that higher education should be valued, like a jam factory, in terms of its contribution to GNP."

If it becomes established federal policy into the foreseeable future that financial assistance to graduate education is provided primarily through direct student aid rather than through institutional aid, then the model would seem to be one which was both "bureaucratic" and "full-cost pricing," or could quickly become so. Certainly it would be bureaucratic if the number of stipends and their distribution among academic fields were determined by government. It would certainly place great emphasis on market factors since the students would be free to take their stipends with them wherever they wish to go. If stipends were substantially equal to tuition charges, then another characteristic of Howard Bowen's full-cost pricing model would be met.

Robert W. Hartmann of the Brookings Institution reminds us that, regardless of the model descriptive of higher education, the possibilities of support for "expensive" programs, at least in public education, are not encouraging. He makes the point in more picturesque language, "barring a messenger from Queen Victoria carrying research grants, the outlook for the 'high cost' sector in public education is bleak."

In an article in the *New York Times Magazine* of June 17, Daniel Greenburg discusses the decline of federal support of science. It is an analysis, however, which in certain important respects can be applied to federal support of graduate study generally. The federal budget-makers' view is ". . .that if aspiring lawyers, architects and business managers are able to get educated without direct federal assistance, there is no reason why aspiring chemists, physicists and mathematicians cannot do the same." He goes on to say: "But as funds shrink and bright youngsters increasingly shy away from careers in science, the situation that is developing is not unlike that of a baseball team with a superb lineup of starters, a sparsely filled bench and a decaying farm system."

I suspect that some of you are saying to yourselves, and aiming at me, such thoughts as "Let's hear what the foundations propose to do about it." I will respond to that most appropriate suggestion but let me repeat first my earlier demurrer: I do not presume to speak for foundations generally and could not if I would. They are as pluralistic as higher education and value this characteristic as much as you do in applying it to yourselves.

Foundations do not possess the resources to pick up, if they wished, all of the support programs federal agencies have dropped or reduced. Even if they had the funds to effect such a rescue, it would be an unwise use indeed of their assets. In the first place, many federal programs are not that worthy. If that sounds like too harsh a statement, I will retreat only to the point of saying that many federal programs are not sufficiently pioneering or productive to merit foundation support. In the second place, foundations would be doing a real disservice to higher education if by stepping in where government agencies have withdrawn they encourage the belief on the part of both executive and legislative officials that it is safe to reduce government support even further since foundations waiting on the sidelines will immediately make up for lost government assistance.

On the positive side, clearly foundations will continue their strong interest in the young, in supporting the training and education of the young and the ideas the young generate. It may be true, however, as with the federal government, that the emphasis may well be on the individual and not on the institution. But such a generalization demands many qualifications. For example, certain foundations of significant size continue to make grants to institutions for endowed professorships and other capital purposes.

Last year fully one-fourth of the private support received by higher education came from foundations. What proportion was for current purposes and what for capital purposes I cannot say,although the reminder is in order that most foundation grants for current purposes are for fixed periods of time with the understanding that the recipient institution will be able to turn to other sources of support after the relatively short original time period has elapsed.

Foundations are not insensitive to the criticism they receive for such a policy. I will be frank enough to admit that at the Sloan Foundation we have seen the unintended and difficult consequences of such a policy in the case, for example, of those private liberal arts colleges to which we provided five years' support for undergraduate science programs at a time when the supply and demand situation for young Ph.D.s in science was the reverse of what it is today and when the financial crunch to be faced by such institutions was only an uncertain and distant threat.

From the point of view of the foundations, long term continuing support makes of the particular foundation only an endowment investment service, one which could be provided equally well by colleges and universities themselves. Rightly or wrongly, foundations pride themselves on their capacity to be flexible, to support uncertain ventures, and to change as opportunities and needs in society change, unfettered by tradition and slow moving bureaucracy.

Some of you have reason to smile at that last sweeping generalization and can provide all kinds of anecdotal evidence to cast doubt upon its validity. But I do think it is true enough most of the time to make the case for the separate existence of foundations.

Foundations do have a quarrel to pick with colleges and universities, although it may be but a lover's quarrel. Inept though we may have been in our own defense during the Congressional hearings that led to the 1969 Tax Reform Act, even more disappointing and a cause for concern was the lack of response, with a few notable exceptions, on the part of colleges and universities when foundations were under attack. We were hardly in a position to invite such a rallying to our side, for it could be misunderstood, and we should not have found it necessary to issue such a call.

Lest I be misunderstood let me say that many if not most of the provisions of the Tax Reform Act of 1969 are to the good and have corrected some practices and abuses that needed correcting. But I am still saddened by the opportunity not taken by colleges and universities to educate both the Congress and the public regarding the role foundations can play in behalf of higher education.

I am further saddened when I read of efforts to disassociate colleges and universities from foundations in the interest of special and preferred treatment under the tax law for colleges and universities. The threat to the charitable tradition in this country finds both of us its target. For the reason that they lack a constituency, and for other reasons, foundations may be hit first but it is only a matter of time before colleges and universities receive the same treatment.

The AAU report of last spring entitled "Tax Reforms and the Crisis of Financing Higher Education" not only accepts but emphasizes the arbitrary distinction between "public charities" or colleges and universities and "private foundations" under the 1969 Tax Reform Act. This is not a position which encourages all elements of organized philanthropy to make common cause in preserving deductibility for gifts willed to charitable purposes.

I ask your indulgence for what might seem to be this diversion from my main thesis, but it is relevant indeed to the role foundations can play in the support of graduate study. That support, as I said a moment ago, is most likely to be based on a belief that the young and their ideas deserve nurture and encouragement. Granted that the young include college undergraduates as well as graduate students and individuals who have just earned the Ph.D., or age groups younger and older than graduate students, but who is in a better position to make the case for the graduate student than you are. And believe it or not, most foundation officers are educable and can be persuaded that their priorities need reordering. Persistence on your part cannot help but pay off.

And this brings me to the third issue, that of access to graduate study by minority groups. I said earlier that while problems associated with such access are still unresolved at the undergraduate level, they are already on the doorstep of the graduate schools. Graduate schools are looked upon as elitist rather than egalitarian, and in many ways properly so, but the elitism should be academic and intellectual and open to individuals of all national and racial backgrounds. This kind of elitism does not contradict efforts to make access egalitarian. Certainly the support of graduate work in public institutions, on the part of both legislators and the general public, will depend on evidence of such access. In both private and public institutions such access is in the public interest.

And is equal opportunity or even equal access enough? As financial and other considerations require graduate schools to become more selective and to enroll fewer students, the aspirations and expectations of minority groups will be increasing. Are we prepared to apply to graduate study the recommendation of the Carnegie Commission that "There should be no barriers to any individual achieving the occupational level which his talent warrants and which his interest leads him to seek." And is even that enough? Don't we have an obligation to insure the generation of the necessary interest, particularly in the able but unmotivated and in the able, unsure or ignorant of their potential?

If the problems, the opportunities, and the obligations I have been talking about under these major headings have any validity, then certainly the fourth issue I would raise has all the spokesmen it needs. Simply expressed, it is the issue of purpose and planning. A sense of purpose is particularly important to counter the sense of urgency which seems to be everywhere. We must be wary lest the urgent displace the important. To make sure this does not happen we must have some definition of the important and some agreement about it.

Joseph Cosand makes the point in more specific and highly critical terms. He maintains that there is little or no long range planning in graduate study on an institutional, consortium, state, or regional basis, let alone a national basis. This in turn he says has led to a preoccupation with numbers; number of institutions, of students, of dollars, of grants, of faculty, of teaching loads, etc. In short, there has been a preoccupation with the urgent and not sufficient attention to purpose and planning.

Earl Cheit warns us that improved quality of graduate programs and of higher education in general will come through planning, control, evaluation and reallocation and not by adding income. He asks the rhetorical question, "Can we be academic though systematic?"

Who should do the planning and who should determine the purposes? Of course, many people both within and without the academic community have a stake and a contribution to make but certainly graduate school administrators must take the leadership. If you don't, in public institutions at least, Howard Bowen's bureaucratic model will rule the day and government agencies will set the goals and do the planning.

Particularly ignored has been the kind of planning which involves both public and private instittions, especially on a regional basis. This is one of the most promising approaches to being both academic and systematic, academic in the sense of insuring the survival and the strengthening of those programs which academia believes to be important and systematic in the sense of insuring the best use of available resources whether they be public or private. What stronger coalition can there be than one involving both public and private institutions whether the case for graduate study is to be made to legislative appropriation committees, federal agencies, or private donors.

Part of the elitist image the public finds it difficult to accept is that which results from the kind of institutional snobbery which places some abstract notion regarding reputation above service to society.

Service to society does not mean responsiveness only to manpower needs and occupational trends. Projections in this area must be made with great care and used with great caution. Some of those made just 18 months ago with respect to graduate education already seem dubious. A larger view of what is meant by service to society is in order. In certain very important ways society is better served by an emphasis on knowledge for its own sake than on training geared to specific manpower projections.

More attention to purpose and planning, within and among institutions, is crucial as the more enlightened control over academic events which graduate school administrators must acquire. Why should the legislator or senior university administrator or the general public confer authority and decision making on graduate school administrators if graduate school programs are allowed to come into being, to grow, or to decline on the basis of chance or by default? High cost academic programs are usually the most visible ones and therefore most vulnerable to the kind of budget slashing which looks only at costs and not at benefits. Purpose and planning are not concepts akin to motherhood; they are not mere labels for abstract notions.

And do not ignore efforts to encourage greater public awareness of purpose. I am not suggesting that the public be brainwashed into developing an image of the Ph.D. in mathematics or English literature equivalent to the image the general public had of the practicing physician a generation or two ago, but more can be done to acquaint the public with the extent to which it is in its own interest to nurture advanced study. Simply stated, graduate schools represent society's most precious intellectual resource. Saying that this should be self-evident flatters both the public and the scholar.

These then are the four issues in graduate education to which I would attach highest priority. Clearly I was over confident when I suggested four was a manageable number for a single speech. I'm afraid that if I have managed anything it is to deal inadequately or superficially with all of them. May I add only that I have much greater confidence in your ability to meet and resolve these issues than I have in my ability to portray them to you.

Report on the Council of Graduate Schools-Graduate Record Examinations Board 1973-74 Survey of Graduate Enrollment

Part I

Robert A. Altman
Program Director
GRE Program

Introduction

As a result of the difficulty of obtaining accurate information on graduate enrollments, and particularly trends in enrollments, the GRE Board and the Council of Graduate Schools began two years ago to conduct an annual series of surveys of enrollment of the membership of the Council of Graduate Schools in the United States. The Council membership consists of some 309 graduate institutions who grant either the master's or doctorate as the highest degree. The members of the Council grant 98% of the master's degrees awarded.

This year's survey, like last year's, was divided into two sections, the first of which was distributed in the early fall of 1973 with a request that results be returned no later than mid-November. Data were requested on enrollment as of mid-October for 1972 and 1973; even given the postponement of several questions until the second questionnaire mailing in January of 1974, a number of institutions were not able to report data on all questions asked or for both years.

It is anticipated that the results of the second questionnaire mailing will be available early in the spring of 1974 and that the survey will be repeated annually with whatever modification in procedure and questionnaiore seems appropriate.

Sample Description

Survey questionnaires were sent to 309 graduate schools who are members of CGS. A total of 281 questionnaires were returned for an amazing 91% response rate, an indication of the continued high interest among graduate schools in the topic of the survey. Since the primary purpose of the questionnaire was to develop comparative data between 1972 and 1973, responses to questions were included in the analysis only when data were supplied for both years. Thus, the effective response rate per question will vary from a high of 91% for the overall sample to a low of 73% for some more detailed question. While this is probably to be expected, the variability does reduce somewhat the value of some questions and makes comparisons across some questions of restricted value.

Extreme care should also be taken in attempting to compare results of this year's survey with published results of last year's survey insofar as 1972 data reported in the current survey may differ from 1972 data reported last year. There are several reasons for this difference, despite the almost identical number (281 in 1973 compared to 277 in 1972) of graduate institutions responding.

First, although the questionnaires and definitions remain unchanged from last year's survey and although the actual number of institutions responding remained almost constant, the specific institutions responding in 1973 were not always identical to those responding in 1972. Second, many institutions noted that the data for 1972 which they were able to provide for this year's survey were different from, and better than, the 1972 data which they provided last year.

Comparison of Usable Sample and Base Population

	CGS Institutions		*Usable Survey Sample*		*% (sample of each population subgroup)*
	Number	*Percent*	*Number*	*Percent*	
Public	196	63%	181	64%	92%
Private	113	37%	100	36%	88%
Public-Master's Highest Degree	45	15%	40	14%	89%
Private-Master's Highest Degree	29	9%	26	9%	90%
Public-Ph.D. Highest Degree	151	49%	141	50%	93%
Private-Ph.D. Highest Degree	84	27%	74	27%	88%
Master's Highest Degree	74	24%	66	24%	89%
Ph.D. Highest Degree	235	76%	215	76%	92%

Despite these limitations, the overall obtained sample (i.e., those submitting usable questionnaires on time) appears to be very representative of the total CGS population. Above are comparisons of number and percentages of several ways of describing the available population and sample. It should be noted that "Master's Highest Degree" refers, throughout this report, only to those institutions for which the master's degree is, in fact, the highest degree awarded. Data for these institutions do not reflect master's degrees offered by institutions which also offer the doctorate.

It is readily apparent that the sample is highly representative of the total population of CGS institutions. Since the sample becomes less complete as the complexity of the questions or the difficulty of obtaining the data increases, number and percentages of total group and subgroup are given for each question in the data presentation.

Results

The results of the survey are displayed in Tables 1 through 7. The tables present the number of respondents with usable data to each question (i.e., data for both years and for all parts of the question), the percentage that number represents of the total group or of the subgroup, e.g., Public, the total number of students reported each year and the percentage change from 1972 to 1973. All data are presented by public, private, and total. In addition, Tables 1 through 3 also present data for institutions classified by means of the Educational Directory, Part 3, in terms of the highest degree awarded. These categories are: Public-Master's Highest; Private-Master's Highest; Public-Doctorate Highest; and, Private-Doctorate Highest. This additional breakdown was not applied to later questions because it was not felt to be particularly important or because the differences were too small to affect the overall results.

Finally, data were summarized by size of the responding graduate school although these summaries do not appear in Tables 1 through 7. Size categories used included 0-100 students, 101-500 students, 501-1,000 students, 1,001-5,000 students, and over 5,000 students, and were based upon the institution's response to Question 1 (Total Graduate School Enrollment). Results including these summaries are noted in the following discussion.

Discussion

A review of Table 1 shows an overall increase in total graduate school enrollment of 4.8% for the institutions reporting. However, when more than the total figures are reviewed, it becomes apparent that the increase is less marked for Ph.D. institutions than for master's institutions, and significantly less marked for private institutions than for public institutions. For all Ph.D. institutions there is a 4.4% increase, an increase of 1.4% for private institutions and an increase of 5.3% for public institutions. For all master's institutions there is an increase of 6.9%, an increase of 2.5% for private institutions and an increase of 7.9% for public institutions.

Rates of increase differ not only for categories of institutions, but for institutions of differing size within categories where smaller institutions (under 500 students) generally declined while larger institutions — and occasionally the very small (under 100 students) — were growing. All sizes of private Ph.D. institutions (overall increase, 1.4%) showed increases in enrollment except those enrolling 101-500 students, where 13 institutions showed a decrease of 3.3%. Increases in enrollment in public Ph.D. institutions (overall increase, 5.3%) were markedly different by size, with eight institutions enrolling fewer than 500 students showing a 4.9% decrease while 133 institutions enrolling more than 500 students showed a 5.3% increase. Public master's institutions (overall increase, 7.9%) showed consistent increases except for institutions enrolling fewer than 500 students, where a slight (2.4%) decrease was found. Private master's institutions (overall increase, 2.5%) showed 10 institutions enrolling between 101 and 500 students with a 1.9% decrease and all other (16) institutions with a 3.3% increase.

First-time enrollments show exactly the opposite pattern, with the overall increase (4.8%) being less marked for master's institutions than for Ph.D. institutions, and less marked for public institutions than for private institutions. For all Ph.D. institutions there is a 5.4% increase, an increase of

6.1% for private institutions and an increase of 5.2% for public institutions. Similarly, for all master's institutions there is a 1.6% increase, an increase of 5.7% for private institutions and an increase of 0.6% for public institutions.

Size differences appear to be reflected less in first-time enrollments than in total graduate school enrollments. While total enrollment showed consistent declines in the smaller institutions, a similar pattern in first-time enrollment emerges only in private master's institutions (overall increase, 5.7%), where 19 institutions enrolling fewer than 1,000 students showed a 6.5% decrease while 3 institutions enrolling more than 1,000 students showed a 24.5% increase. The pattern for other institutions is mixed, with increases in all size categories except those enrolling 1,001-5,000 students in public master's institutions and those enrolling 101-500 in private Ph.D. institutions. As suggested, public Ph.D. institutions showed consistent increases in all size categories.

Number of assistantships held by graduate students increased slightly in 1973, solely as a result of increases for public Ph.D. institutions (2.8%) which offset declines in all other categories. For all Ph.D. institutions, assistantships increased 2.1%, a decrease of 1.4% for private institutions offset by the increase at public institutions. For all master's institutions, where the numbers of assistantships were much smaller, the overall decrease was 2.4%, a decrease of 16.4% for private institutions and 0.3% for public institutions.

The influence of institutional size on number of assistantships is varied and unclear. Private master's institutions showed consistent decreases, except for those 8 institutions enrolling between 101 and 500 students, which showed an increase of 15.5%. In like manner, private Ph.D. institutions showed consistent decreases, except that the isolated increases (9 institutions up 2.3%) occurred in larger institutions, those enrolling between 501 and 1,000 students. In the case of public Ph.D. institutions, increases were consistent across all size categories except one; in this instance, 7 institutions enrolling between 101 and 500 students showed a decrease in number of assistantships of 3.4%. Only in public master's institutions does a pattern emerge with respect to size; 14 institutions enrolling fewer than 1,000 students showed an increase of 6.3%, while 23 institutions enrolling more than 1,000 students showed a decrease of 2.8%.

Fellowships showed a continuing decline in 1973, particularly at public institutions. There was an overall decrease of 7.8% among the institutions reporting. In the public institutions, the decrease was 10.4%, while in the private institutions it was 2.9%. Fellowships decreased in all size categories of public institutions and in all size categories of private institutions except those enrolling fewer than 100 students. The number of fellowships involved at master's institutions was too small to warrant separate treatment.

The number of degrees awarded continued to increase but at a slightly slower pace for doctorates than for master's. Master's degrees were up 2.4% during 1973 and Ph.D. degrees up 1.7% for the same period. The public Ph.D. increase was almost identical (1.7%) with that of private Ph.D. institutions (1.6%), while the percentage of increase for master's degrees was greater for the private institutions (3.2%) than for public institutions (2.1%). Master's awarded followed a constant pattern across institutional types, with decreases at smaller institutions and increases at larger institutions. Award of Ph.D.'s increased in all size categories for both public and private Ph.D. institutions.

Table 7 indicates a breakdown of full- and part-time students for those institutions reporting. The table indicates that the proportion of part-time students has increased slightly at public institutions since 1972, while remaining almost constant at private institutions.

Conclusion

The first section of the third CGS-GRE Board Survey of Graduate School Enrollment met with great success in terms of number of responses and, to a slightly lesser degree, in terms of response rate to individual questions. The representativeness of the sample and its overall completeness do lend validity to the results of the survey, which will not surprise many actively engaged in graduate education but may not support the assumptions of much of the general public.

One exception may arise from the attempt again this year to review responses by size of responding institutions. Although this additional analysis tended to uncover patterns which might have been expected, it did reveal, for example, that enrollment growth appears to be markedly tied to institutional size with smaller institutions showing enrollment decreases in the face of continuing increases at larger institutions. And, while total enrollment and degrees awarded continue to increase, financial support for graduate education, particularly as reflected in the number of available fellowships, continued to decline.

It seems important that information of this type continue to be collected, and that current efforts to make it more complete and detailed by dividing this survey into two parts have had a positive effect. If the second section of the survey receives the same response as has its predecessor, the survey should serve as a valuable addition to the total pool of information about graduate education.

December 11, 1973

TABLE 1

Total Graduate School Enrollment by Type of Institution*

	Number	*%***	*1972*	*1973*	*% Change*
Public-Master's Highest	40	89%	74,242	80,164	7.9% increase
Private-Master's Highest	26	90%	16,427	16,839	2.5% increase
Public-Ph.D. Highest	141	93%	395,947	417,020	5.3% increase
Private-Ph.D. Highest	74	88%	116,070	117,674	1.4% increase
Master's Highest	66	89%	90,669	97,003	6.9% increase
Ph.D. Highest	215	92%	512,017	534,694	4.4% increase
Public-Master's and Ph.D.	181	92%	470,189	497,184	5.7% increase
Private - Master's and Ph.D.	100	88%	132,497	134,513	1.5% increase
Total	281	91%	602,686	631,697	4.8% increase

---

* For purposes of this survey, institutions were asked to include all students considered as registered in the graduate school, including Education, Engineering, Social Work, Medical and Business Programs leading to MA/MS or Ph.D., Ed.D., or other doctorates.

** Percentage figures are percent of the number responding of the number available in the total group. For example, 40 Public Master's Highest Degree institutions responded out of a possible 45 such institutions in the CGS membership for an 89% response rate for that group of institutions.

TABLE 2

First Time Graduate Enrollment by Type of Institution

	Number	*%*	*1972*	*1973*	*% Change*
Public-Master's Highest	32	71%	18,004	18,121	0.6% increase
Private-Master's Highest	25	86%	4,413	4,666	5.7% increase
Public-Ph.D. Highest	128	85%	97,340	102,449	5.2% increase
Private-Ph.D. Highest	69	82%	31,696	33,628	6.1% increase
Master's Highest	57	77%	22,417	22,787	1.6% increase
Ph.D. Highest	197	84%	129,036	136,077	5.4% increase
Public-Master's and Ph.D.	160	82%	115,344	120,570	4.5% increase
Private-Master's and Ph.D.	94	83%	36,109	38,294	6.0% increase
Total	254	82%	151,453	158,864	4.8% increase

TABLE 3

Number of Graduate Assistants (Service Required)

	Number	*%*	*1972*	*1973*	*% Change*
Public-Master's Highest	37	82%	4,021	4,007	0.3% decrease
Private-Master's Highest	22	76%	609	509	16.4% decrease
Public-Ph.D. Highest	126	83%	78,605	80,844	2.8% increase
Private-Ph.D. Highest	66	78%	16,645	16,407	1.4% decrease
Master's Highest	59	79%	4,630	4,516	2.4% decrease
Ph.D. Highest	192	82%	95,250	97,251	2.1% increase
Public-Master's and Ph.D.	163	83%	82,626	84,851	2.6% increase
Private-Master's and Ph.D.	88	77%	17,254	16,916	1.9% decrease
Total	251	81%	99,880	101,767	1.8% increase

TABLE 4

Number of Graduate Fellows (Nonservice Required)

	Number	*%*	*1972*	*1973*	*% Change*
Public-Master's and Ph.D.	141	72%	26,629	23,862	10.4% decrease
Private - Master's and Ph.D.	86	76%	14,211	13,792	2.9% decrease
Total	227	73%	40,840	37,654	7.8% decrease

TABLE 5

Number of Master's Degrees

	Number	*%*	*1971-72*	*1972-73*	*% Change*
Public	181	92%	119,402	121,959	2.1% increase
Private	100	88%	35,180	36,316	3.2% increase
Total	281	91%	154,582	158,275	2.4% increase

TABLE 6

Number of Ph.D. Degrees

	Number	*%*	*1971-72*	*1972-73*	*% Change*
Public	139	92%	20,986	21,359	1.7% increase
Private	74	88%	7,772	7,901	1.6% increase
Total	213	91%	28,758	29,260	1.7% increase

TABLE 7

Full-time — Part-time Total Enrollment*

			1972				1973			
	Number	%	*Full-time Number*	%	*Part-time Number*	%	*Full-time Number*	%	*Part-time Number*	%
Public	168	86%	199,390	47%	221,805	53%	204,207	46%	239,335	54%
Private	97	86%	60,145	48%	64,290	52%	60,478	48%	65,558	52%
Total	265	86%	259,535	48%	286,095	52%	264,685	46%	304,893	54%

---

*Institutions were directed to apply their own institutional definitions to "part-time" and "full-time."

The Constitution of the Council of Graduate Schools in the United States

1. *Name*

This organization shall be called the Council of Graduate Schools in the United States.

2. *Purpose*

The Council is established to provide graduate schools in the United States with a comprehensive and widely representative body through which to counsel and act together.

Its purose is the improvement and advancement of graduate education. The purview of the Council includes all matters germane to this purpose. The Council shall act to examine needs, ascertain best practices and procedures, and render assistance as indicated; it may initiate research for the furthering of the purpose. It shall provide a forum for the consideration of problems and their solutions, and in meetings, conferences, and publications shall define needs and seek means of satisfying them in the best interests of graduate education throughout the country. In this function the Council may act in accordance with the needs of the times and particular situations to disseminate to the public, to institutions, to foundations, to the federal, state, and local governments, and other groups whose interest or support is deemed of concern, information relating to the needs of graduate education and the best manner of satisfying them.

In the analysis of graduate education, in the indication of desirable revision and further development, in the representation of needs and all other functions related to effecting its purpose, the Council not only shall be free to act as an initiating body, but it shall assume direct obligation for so doing.

3. *Membership*

Institutions applying for membership shall be considered in the light of the following criteria:

a. Applicants for membership must be accredited by the appropriate regional accrediting agency as a college or university approved for the offering of graduate work.

b. Applicants must have conferred at least thirty degrees of Master of Arts or Master of Science or ten Doctor of Philosophy degrees, or appropriate combination, within the three-year period preceding application.

c. The degrees conferred must be adequately distributed over at least three distinct disciplines, such as but not limited to:

agriculture
anthropology
astronomy
bacteriology
biochemistry
botany
chemical engineering
chemistry
civil engineering
classics
economics
electrical engineering
English
entomology
fine arts
French
geography
geology
German
history
mathematics
mechanical engineering
music
pharmacology
philosophy
physics
physiology
political science
psychology
Russian
sociology
Spanish
zoology

The Committee on Membership shall consider all applications in the light of these criteria and make appropriate recommendations to the Executive Committee. The Executive Committee shall take final action on all applications for membership and shall report such action at each Annual Meeting.

The Executive Committee may invite and approve applications by foreign institutions of good standing for affiliation with the Council if such institutions meet all criteria for membership except accreditation by an American regional accrediting agency. Such affiliates will be extended all the courtesies of membership except the privilege of voting.

4. *Voting Power*

In all activities of the Council, each member institution shall have one vote.

More than one representative of any institution may attend the meeting of the Council, but the member's vote shall be cast by the individual designated as the principal representative of the member by the chief administrative officer of the member institution.

5. *Officers and Executive Committee*

The officers of the Council and the Executive Committee shall be a Chairman, a Chairman-Elect, and the immediate Past Chairman, each serving for a term of one year. In the absence of the Chairman, the Chairman-Elect shall be the presiding officer of the Executive Committee and the Council.

There shall be an Executive Committee of twelve voting members, composed of the Chairman, the Chairman-Elect, the Past Chairman and nine members-at-large. Three members-at-large shall be elected by the Council at each Annual Meeting for terms of three years each, beginning immediately after the Annual Meeting.

The Chairman-Elect, chosen by the Executive Committee from its own past or present membership, shall serve in that capacity for one year. The following year, he will assume the office of Chairman, and the following year, the office of Past Chairman.

Each voting member of the Executive Committee must be the principal representative of a member of the Council, and none may serve for two consecutive full terms.

If the Chairman is unable to continue in office, the Chairman-Elect shall succeed immediately to the chairmanship, and the Executive Committee shall choose a new Chairman-Elect.

Any vacancies occurring among the membership-at-large of the Executive Committee shall be filled by the Executive Committee until the next Annual Meeting, at which time the Council shall elect a replacement for the balance of the term.

6. *Executive Officers*

The chief executive officer of the Council shall be a President, who shall be a salaried officer, appointed by the Executive Committee and serving at its pleasure. The President shall serve as an *ex-officio* member of the Executive Committee without a vote.

7. *Duties and Powers of the Executive Committee*

In addition to the duties and powers vested in the Executive Committee elsewhere in this Constitution, the Executive Committee may, specifically: employ such staff and establish such offices as may seem necessary; incorporate; undertake itself, or through its agents, to raise funds for the Council and to accept and expend monies for the Council; take initiative and act for the Council in all matters including matters of policy and public statement except where limited by this Constitution or by actions of the Council.

8. *Committees*

In addition to the Executive Committee, there shall be (1) a Nominating Committee, (2) a Committee on Membership, whose members shall not be members of the Executive Committee, and (3) such other standing committees as may be established by the Executive Committee.

Except for the Nominating Committee, all standing committees and *ad hoc* committees shall be appointed by the Chairman with the advice and consent of the Executive Committee.

The Nominating Committee shall consist of five members of whom three shall be elected each year by the Council at its annual meeting, and two shall be the members-at-large of the Executive Committee who are completing their terms. The Chairman shall be elected by the Committee.

At least two weeks before each annual meeting of the Council, the Nominating Committee shall propose to the members of the Council one nominee for each member-at-large position of the Executive Committee to be filled and three nominees for members of the Nominating Committee. These nominations shall be made only after suggestions accompanied by supporting vitae have been solicited from the membership-at-large.

At the annual business meeting of the Council, additional nominees may be proposed from the floor. The election will then be held, and the nominees receiving the largest number of votes for the positions to be filled shall be declared elected.

9. *Meetings*

The Council shall hold an Annual Meeting at a time and place determined by the Executive Committee. The Council may meet at other times on call of the Executive Committee.

The Executive Committee shall be responsible for the agenda for meetings of the Council. Reports and proposals to be submitted for action by the Council shall be filed with the Executive Committee before they may be submitted for general discussion by the Council. No legitimate report or proposal may be blocked from presentation to the Council, but action on any proposal may not be taken until the Executive Committee has had an opportunity to make a recommendation.

In matters not provided for in this Constitutionn parliamentary procedure shall be governed by *Robert's Rules of Order, Revised.*

10. *Limitation of Powers*

No act of the Council shall be held to control the policy or line of action of any member institution.

11. *Dues*

Membership dues shall be proposed by the Executive Committee and must be approved by the majority of the membership after due notice.

12. *Amendments*

Amendments to this Constitution may be proposed by the Executive Committee or by written petition of one-third of the members. However they originate, proposals for amendment shall be received by the Executive Committee and forwarded with recommendations to the members, in writing, at least ninety days before the meeting at which they are to be voted upon or before formal submission to the members for a mail ballot. To be adopted, proposed amendments must receive the approval of a two-thirds majority of the members voting at the announced meeting or on the designated mail ballot.

13. *Bylaws*

Bylaws may be established by the Executive Committee at any regular or special meeting, subject to ratification by a simple majority vote of the Council at the next Annual Meeting.

BYLAWS

1. In conformity with Article 6 of the Constitution, the President of the Council of Graduate Schools in the United States shall be paid an annual salary to be determined by the Executive Committee plus such

perquisites as may be necessary for the proper conduct of the office and such travel as may be deemed essential. The President is authorized to employ such additional personnel as is, in his judgment, necessary for the proper conduct of the office, to establish bank accounts in the name of the Council of Graduate Schools in the United States, and to draw checks and invest monies against the Council's account or accounts, subject to an annual audit of the books of the Council by a Certified Public Accountant and approval by the Executive Committee.

2. The Riggs National Bank of Washington, D.C., is hereby designated a depositary for the funds of this association and the said bank is hereby authorized and directed to pay checks and other orders for the payment of money drawn in the name of this association when signed by the President and the said bank shall not be required in any case, to make inquiry respecting the applications of any instrument executed in virtue of this resolution, or of the proceeds therefrom, nor be under any obligation to see in the application of such instrument of proceeds.

3. In the event of the dissolution of the Council of Graduate Schools, all then existing assets of the Council shall be distributed in equal parts to the institutions which will at that time be members of the Council.

4. After January 1, 1969, the fiscal year of the Council of Graduate Schools in the United States will correspond to the calendar year. (Prior to this date, the fiscal year ran from April 1 through March 31.)

5. In the event of the death or disability of the President of the Council, the Chairman shall immediately call a meeting of the Executive Committee to select an Acting President, who shall assume the responsibilities of the President, as they are specified in Article 6 of the Constitution and in Bylaws 1 and 2, until the appointment of a new President.

PROCEDURAL POLICIES

1. Annual meetings of the Council shall be held during or near the first week of December.

2. If a member resigns, it must reapply for admission in the normal way if it wishes to resume membership.

3. Membership or affiliation, with or without vote, of non-academic institutions, associations, or foundations is undesirable.

4. Institutions accepted to membership prior to September 1 in any given year are required to pay dues for that fiscal year.

The Council of Graduate Schools in the United States

Member Institutions

Abilene Christian College
Adelphi University
Air Force Institute of Technology
Alfred University
*American University
Andrews University
Appalachian State University
Arizona State University
Arkansas State University
Atlanta University
Auburn University
Ball State University
Baylor College of Medicine
Baylor University
*Boston College
Boston University
Bowling Green State University
Bradley University
*Brandeis University
Brigham Young University
Brooklyn College of the City University of New York
*Brown University
*Bryn Mawr College
*California Institute of Technology
California State Polytechnic University, Pomona
California State University at Chico
California State University at Fresno
California State University at Fullerton
California State University at Hayward
California State University at Long Beach
California State University at Los Angeles
California State University at Northridge
California State University at Sacramento
California State University at San Diego
California State University at San Francisco
California State University at San Jose
*Carnegie-Mellon University
*Case Western Reserve University
*Catholic University of America
Central Michigan University
Central Missouri State College
Central Washington State College
Chicago State University
The City College of the City University of New York
The City University of New York
*Claremont University Center
*Clark University
Clarkson College of Technology
Clemson University
Cleveland State University
Colgate University
College of Saint Rose
College of William and Mary
Colorado School of Mines
Colorado State University
*Columbia University
Connecticut College
*Cornell University
Creighton University
Dartmouth College
DePaul University
Drake University
Drexel University
*Duke University
Duquesne University
East Carolina University
East Tennessee State University
East Texas State University
Eastern Michigan University
*Emory University
Fisk University
Florida Atlantic University
*Florida State University
*Fordham University
Fort Hays Kansas State College

George Peabody College
*George Washington University
*Georgetown University
Georgia Institute of Technology
Georgia State University
Hahnemann Medical College and Hospital of Philadelphia
*Harvard University
Hebrew Union College
Hofstra University
Holy Names College
Howard University
Hunter College of the City University of New York
Idaho State University
*Illinois Institute of Technology
Illinois State University
Immaculate Heart College
Indiana State University
*Indiana University
Indiana University of Pennsylvania
*Iowa State University
John Carroll University
*Johns Hopkins University
Kansas State College of Pittsburg
Kansas State Teachers College
*Kansas State University
Kent State University
Lamar University
*Lehigh University
Loma Linda University
Long Island University
*Louisiana State University
Louisiana State University in New Orleans
Louisiana Tech University
Lowell Technological Institute
*Loyola University of Chicago
Loyola University of Los Angeles
Mankato State College
Marquette University
*Massachusetts Institute of Technology
Medical College of Georgia
Medical College of Pennsylvania
Medical College of Virginia
Memphis State University
Miami University
*Michigan State University
Michigan Technological University
Middle Tennessee State University
Mississippi College
Mississippi State University
Montana State University
Montclair State College
Morgan State College
Murray State University
Naval Postgraduate School
New Mexico Institute of Mining and Technology
New Mexico State University
*New School for Social Research
*New York University
Newark College of Engineering
Niagara University
North Carolina Central University
*North Carolina State University at Raleigh
North Dakota State University
North Texas State University
Northeast Louisiana University
Northeastern Illinois University
Northeastern University
Northern Illinois University
Northwestern State College
*Northwestern University
Oakland University
*Ohio State University
Ohio University
*Oklahoma State University
Old Dominion University
*Oregon State University
*Pennsylvania State University
Pepperdine University
*Polytechnic Institute of New York
Pratt Institute
*Princeton University
*Purdue University
Queens College of the City University of New York
*Rensselaer Polytechnic Institute
*Rice University
*Rockefeller University
Roosevelt University
*Rutgers, The State University
Saint Cloud State College
*Saint John's University
*Saint Louis University
Saint Mary's University
Sam Houston State University
Samford University
Seattle University
Seton Hall University
Shippensburg State College

South Dakota State University
Southern Illinois University at Carbondale
Southern Illinois University at Edwardsville
Southern Methodist University
Southwest Texas State University
*Stanford University
State University College at Fredonia
State University College at Genesco
State University of New York at Albany
State University of New York at Binghamton
*State University of New York at Buffalo
State University of New York—Downstate Medical Center
State University of New York at Stony Brook
Stephen F. Austin State University
Stetson University
Stevens Institute of Technology
*Syracuse University
*Temple University
Tennessee State University
Tennnessee Technological University
*Texas A&M University
Texas Christian University
Texas Southern University
Texas Tech University
Texas Woman's University
Thomas Jefferson University
Trinity University
Tufts University
*Tulane University
Tuskegee Institute
United State International University
Utah State University
*Vanderbilt University
Villanova University
*Virginia Polytechnic Institute
Wagner College
*Washington State University
*Washington University
*Wayne State University
Wesleyan University
West Texas State University
*West Virginia University
Western Carolina University
Western Illinois University
Western Kentucky University
Western Michigan University
Western State College of Colorado
Western Washington State College
Wichita State University
Winthrop College
Worcester Polytechnic Institute
Wright State University
Xavier University
*Yale University
Yeshiva University
University of Akron
*University of Alabama
University of Alabama in Birmingham
University of Alabama in Huntsville
*University of Arizona
University of Arkansas
*University of California at Berkeley
University of California at Davis
University of California at Irvine
University of California at Los Angeles
University of California at Riverside
University of California at San Diego
University of California at Santa Barbara
*University of Chicago
*University of Cincinnati
*University of Colorado
University of Connecticut
University of Dayton
*University of Delaware
*University of Denver
University of Detroit
*University of Florida
University of Georgia
University of Hawaii
University of Houston
University of Idaho
University of Illinois at Chicago Circle
University of Illinois at the Medical Center
*University of Illinois at Urbana-Champaign
*University of Iowa

- *University of Kansas
- *University of Kentucky
- University of Louisville
- University of Maine
- *University of Maryland
- University of Massachusetts
- University of Miami
- *University of Michigan
- University of Minnesota
- University of Mississippi
- University of Missouri at Columbia
- University of Missouri at Kansas City
- University of Missouri at Rolla
- University of Missouri at St. Louis
- University of Montana
- *University of Nebraska
- University of Nebraska at Omaha
- University of Nevada
- University of New Hampshire
- University of New Mexico
- *University of North Carolina at Chapel Hill
- University of North Carolina at Greensboro
- *University of North Dakota
- University of Northern Colorado
- University of Northern Iowa
- *University of Notre Dame
- *University of Oklahoma
- *University of Oregon
- University of the Pacific
- *University of Pennsylvania
- *University of Pittsburgh
- University of Rhode Island
- University of Richmond
- *University of Rochester
- University of San Francisco
- University of Santa Clara
- University of Scranton
- University of South Carolina
- University of South Dakota
- University of Florida
- *University of Southern California
- University of Southern Mississippi
- University of Tennessee Medical Units
- *University of Tennessee System
- University of Texas at Arlington
- *University of Texas at Austin
- University of Toledo
- University of Tulsa
- *University of Utah
- University of Vermont
- *University of Virginia
- *University of Washington
- *University of Wisconsin
- University of Wisconsin-Milwaukee
- *University of Wyoming

*Founding institutions.